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The retention of first-time, first-year students to their sophomore year is important to institutions of higher education because this retention predicts the students' persistence through graduation at their institutions (Bean, 1990; Tinto, 1993). Tinto (1993) suggested that academic integration and social integration lead students to persist. One aspect of the social milieu that has received little attention in retention research is intercollegiate athletics. The purpose of this study was to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs with football.

Within the social milieu of an institution are practices that foster a sense of community in the institution (Braxton & Hirschy, 2004); a sense of belonging to the institution (Freeman, Anderman, & Jensen, 2007; Hausmann, Schofield, & Woods, 2007; Tinto, 1987, 1993); a social support system within the institution (Tinto, 1993); student interactions with faculty (Tinto, 1993); student interactions with staff (Tinto, 1993); and student interactions with peers (Tinto, 1993). Through an online questionnaire, student affairs professionals from NCAA Division III institutions with football rated the extent to which intercollegiate athletics contribute to the social integration of first-time, first-year students and to the six variables that lead to social integration using a 5-point rating scale. Respondents described how intercollegiate athletics contribute to the six variables on

their campuses. The respondents described retention practices of their institutions that intentionally incorporate intercollegiate athletics and rated the effectiveness of those practices using a 5-point rating scale. Respondents rated the effectiveness of their overall intercollegiate athletics programs and ten sports in retaining students.

Findings indicated that the role of intercollegiate athletics in the retention of first-time, first-year students at institutions sponsoring Division III athletics with football is focused on the athletes. Most of the described retention practices were focused on assisting the athletes with their social integration on their campuses. Athletes at the respondents' institutions made up as much as 59% of the total enrollment; thus, specific retention practices focused on athletes at these institutions may also influence the overall retention of first-time, first-year students at the institutions. Effective retention practices incorporating intercollegiate athletics are discussed and recommended.

THE ROLE OF INTERCOLLEGIATE ATHLETICS IN THE RETENTION OF FIRST-
TIME, FIRST-YEAR STUDENTS AT NCAA DIVISION III INSTITUTIONS
WITH FOOTBALL

by

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To my wife, Emily, and daughters, Anna, and Ashley

APPROVAL PAGE

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CHAPTER I

INTRODUCTION

The retention of first-time, first-year students to their sophomore year is important to institutions of higher education because this retention predicts the students' persistence through graduation at their institution (Bean, 1990; Tinto, 1993). Tinto (1993) suggested that two environmental factors, academic integration and social integration, lead students to persist at their institutions through graduation. To enhance retention efforts, institutions employ various practices recommended by retention scholars, typically through academic services and campus life programs, to facilitate their students' academic and social integration. Many institutions have developed programs such as learning communities and residential policies based on the retention theories developed by Tinto (1975, 1993) and Astin (1985) (see Bean & Eaton, 2001-2002; Berger, 2001-2002; Braxton & McClendon, 2001-2002). Absent from the recommended practices is the intentional use of one of the most visible aspects of most institutions in the United States: the intercollegiate athletics program. Because intercollegiate athletics programs lie in the social environment of an institution, it may have an impact on the social integration, and thus retention, of first-time, first-year students.

Braxton, Sullivan, and Johnson (1997) tested the empirical support of the propositions developed from Tinto's (1975, 1987, 1993) theory of student retention. The propositions that are useful to this study of social integration through intercollegiate

athletics state “the greater level of social integration, the greater level of subsequent commitment to the institution” (Braxton, Sullivan, & Johnson, p. 112), and “the greater level of subsequent commitment to the institution, the greater the likelihood of student persistence in college” (Braxton, Sullivan, & Johnson, p. 112). Retention scholars would argue that increased integration within the formal and informal social systems of the institution would reinforce the level of commitment that students display to their institutions, which increases the likelihood of retention. As indicated by Tinto (1987), institutions offer formal social opportunities through extracurricular activities in which students interact with one another, faculty, and staff. These social opportunities assist students in developing a sense of belonging to the institution and a sense of community within the institution. A sense of belonging is an important factor in students’ decisions to persist at their institution (Freeman, Anderman, & Jensen, 2007; Hausmann, Scholfield, & Woods, 2007). Another important factor is the sense of community that develops from the students’ perception of “[c]ommunal potential... the degree to which a student perceives that a subgroup of students exists within the college community with which that student shares similar values, beliefs and goals” (Braxton & Hirschy, 2004, p. 95). When students find the community within their institution, they feel as if they belong, thus influencing the likelihood that they will continue their enrollment at their institution. Braxton, Sullivan, and Johnson (1997) found that empirical studies of individual institutions strongly supported the two propositions above which together suggest that social integration leads to the retention of first-time, first-year students.

Practices based on Tinto's (1987) interaction theories and recommended by researchers include specific opportunities to foster social integration among students. Some of these practices are first-year student orientation programs that occur before classes begin in the fall semester which encourage interactions with peer first-time, first-year students and with selected student leaders (Benjamin, Earnest, Gruenewald, & Arthur, 2007). Another practice that fosters both academic and social integration is the facilitation of learning communities. Learning communities take on various forms such as intentionally linked courses and specific residence hall arrangements. This practice encourages informal interactions with peers and has been found to reinforce social integration and to enhance retention (Love, 1999). Likewise, contact programs such as intentional study groups or mentoring programs encourage interactions among peers, faculty, and staff (Tinto, 1993).

The intentional use of intercollegiate athletics as a retention tool for all first-time, first-year students has not been addressed in these recommendations. As Chabotar (2006) asserts, "The role of athletics is a primary strategic and financial concern at many colleges and universities" (p. 13). Institutions spend significant amounts of money on their intercollegiate athletics programs, and although not empirically supported, some scholars surmise that institutions do so because intercollegiate athletics contribute to some degree to the retention of students (Mangold, Bean, & Adams, 2003).

The first year retention rate of colleges is considered a major factor in the ultimate graduation rate four to six years later. Student involvement (Astin, 1985) in the formal and informal academic and social environments of their institutions (Tinto, 1993) leads to

persistence at the institution. Intercollegiate athletics role in integrating students to their campuses lies in the social environment. Thomas (1990) indicated that institutions that retain their students through social integration “are likely to have a strong sense of campus community and tradition to which students feel affection and loyalty” (p. 197). College athletics are steeped in tradition (see for example Toma, 2003) and, as Boyer (1987) asserted, maybe a resource to develop campus community. Spectator sports have often been described as opportunities to build community amongst diverse groups (Duderstadt, 2000; Lever, 1983; Toma, 1998, 2003; Wann et al., 2001). Additionally, spectator sports satisfy the needs of some individuals by offering opportunities to develop affiliations and senses of belonging to a larger collective (Green & Costa, 2007; Shank, 1999; Wann et al., 2001). Intercollegiate athletics can also be a means of contributing to the identification first-time, first-year students have with the institution (Green & Costa, 2007; Milne & McDonald, 1999; Wann & Robinson, 2002). The stronger the students identify with their institution, the more likely they will persist at that institution due to their loyalty (Wann & Robertson, 2002).

Research studies on the impact of intercollegiate athletics on student retention have yielded mixed results. Mangold, Bean, and Adams (2003) and Tucker (1992, 2004) utilized aggregate data collected from existing databases to analyze the impact of intercollegiate athletic success on the graduation rates of institutions participating in Division I competition. The results of these analyses for institutions in NCAA Division I intercollegiate athletics indicated that men’s basketball win/loss record (Mangold, Bean, & Adams, 2003) and football win/loss record and bowl game appearances (Tucker, 1992)

have negative impacts on the graduation rates of all students. Mangold, Bean and Adams found that Division I basketball programs with winning records negatively impacted graduation rates by as much as 2.66%. The authors suggested that the negative impact on graduation rates could be greater at smaller institutions because the on court success of the team “could act as a distraction” (Mangold, Bean, & Adams, p. 551) from academic pursuits. Tucker (1992) found that major football programs (Division I-A) with a winning record would experience a decline of up to 4% in the graduation rate of all students. Tucker (1992) speculated that students would forego studying on weekends to attend football games and related parties such as tailgating and post-game parties. A more recent study by Tucker (2004) found a positive relationship between success on the football field and graduation rates of all students.

Research involving tracking student involvement in spectator sports and surveys of student involvement with intercollegiate athletics programs revealed positive implications of the impact intercollegiate athletics programs have on retention and persistence. For example, Schurr et al. (1993) tracked students who attended men’s basketball games during their first year at Ball State University through six years and compared the graduation rates with those students who did not attend the games. They found that the students who attended games graduated at a higher rate than students who did not. Wann and Robertson (2002) found through survey research that students who attended institutions sponsoring Division I intercollegiate athletics programs and identified with their institutions intercollegiate athletics teams were more likely to persist at their institutions.

The majority of research on intercollegiate athletics and retention has focused on large institutions participating in Division I athletics. These athletic programs are highly commercialized with appeal to broader national audiences such as alumni, legislators, and corporate entities (Barr, 2009; Toma, 2003). The Division I athletic programs are large programs sponsoring at least fourteen varsity teams with scholarship athletes. Funding for these programs comes from the revenue that the programs generate (Barr, 2009, p. 153).

Largely ignored in research are the less commercialized intercollegiate athletics programs of Division II and Division III. These programs focus on the student-athletes' participation rather than on producing revenues (Barr, 2009; Staurowsky & Abney, 2007) or on the experience of spectators (Barr, 2009). Competition in these divisions is primarily regional with conference opponents as the majority of competitors (Barr, 2009). Division II allows athletic scholarships, but Division III prohibits athletically based financial aid (Barr, 2009). Intercollegiate athletics programs in these divisions are funded similarly to academic departments rather than from revenues generated from the programs (Barr, 2009).

Potter (2000) found that some students at small to moderate sized institutions viewed intercollegiate athletics at their institutions as an important reason for continuing at their colleges but that overall intercollegiate athletics had little effect on retention decisions. Weatherall (2006) found that administrators of Division III institutions utilized intercollegiate athletics to increase their enrollments and to improve their retention rates. Administrators have indicated intercollegiate athletics can improve the overall retention

rate because student-athletes are more likely than their non-athlete counterparts to persist at their institutions through graduation (Dimaria & Pullano, 2004; Weatherall, 2006).

The intentional practice of incorporating intercollegiate athletics in the retention efforts of institutions is largely unknown. One study indicated that intercollegiate athletics potentially influence retention rates because the athletes may be retained at higher rates than non-athletes (Weatherall, 2006). Furthermore, the importance of the intercollegiate athletics programs to retention efforts of all students is unknown. National research studies of retention practices that foster social integration have neglected the contributions that intercollegiate athletics have in retaining students (Habley & McClanahan, 2004). Accordingly, it is important and timely to advance an understanding of the impact that intercollegiate athletics have on retention of first-time, first-year students.

Conceptual Framework

From the review of literature, a conceptual framework for this study was developed (Figure 1). In moving from theory to practice, administrators responsible for the retention of first-time, first-year students will implement retention practices to foster integration within the academic and social domains (Bean & Eaton, 2001-2002; Berger, 2001-2002; Braxton & McClendon, 2001-2002; Tinto, 1987, 1993). Within the social domain are practices that foster student interactions with faculty, staff, and peers, a sense of community in the institution, a sense of belonging to the institution, and a social support system within the institution. Because intercollegiate athletics reside within the social domain of institutions, the retention practices involving intercollegiate athletics

would foster the social integration of first-time, first-year students. Social integration combined with academic integration results in the persistence of students.

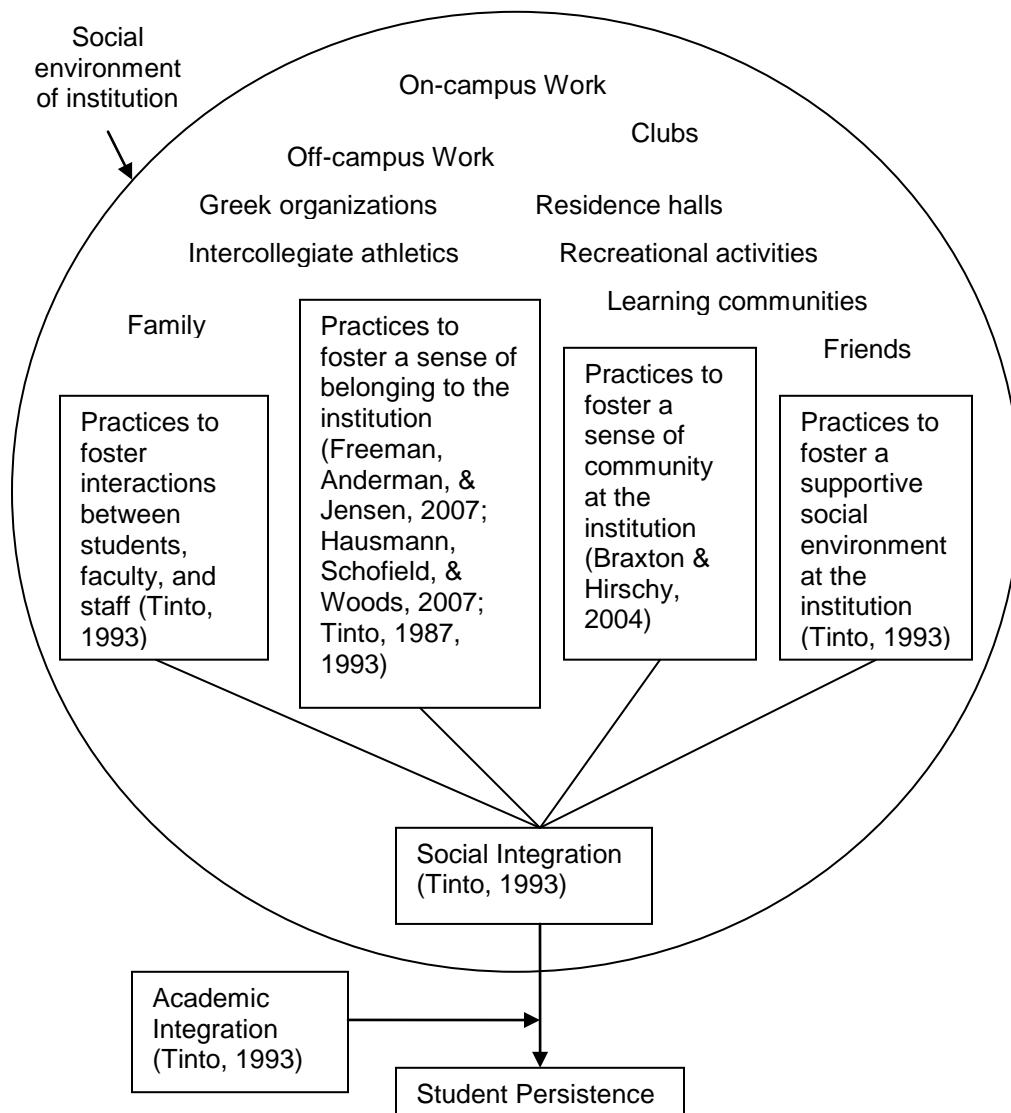


Figure 1: Conceptual Framework Based on Braxton & Hirschy (2004), Freeman, Anderman, & Jensen (2007), Hausmann, Schofield, & Woods, (2007), and Tinto (1987, 1993)

Statement of Purpose

The purpose of this study is to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs.

Definition of Terms

Academic integration: “The extent to which students are doing reasonably well in their classes (academic achievement), perceive their classes to be relevant and have practical value ..., and are satisfied with their majors” (Kuh & Love, 2000, p. 197).

Attrition: The loss of students at an institution because the student does not re-enroll for consecutive semesters (Berger & Lyon, 2005).

Contact program: Retention practice designed to facilitate contact among first-time, first-year students and peers, faculty, and/or staff. A contact program may be designed to enhance academic or social integration (Tinto, 1993).

First-time, first-year student: A student who is attending a higher education institution for the first time having never attended any other higher education institution.

Institutional commitment: “The degree to which one is willing to work toward the attainment of one’s goals within a given higher educational institution” (Tinto, 1993, p. 43). Institutional commitment is displayed by students who achieve at least minimal academic requirements to remain at their institutions because they want to remain at the institution for some specific reason. For some students, the

reason may be to remain at the institution for its academic quality; for others, it may be for the campus life aspects including the intercollegiate athletic program.

Persistence: “The desire and action of a student to stay within the system of higher education from beginning year through degree completion” (Berger & Lyon, 2005, p. 7). Persistence does not require a student to remain with a single institution from beginning to graduation.

Retention: “The ability of an institution to retain a student from admission to the university through graduation” (Berger & Lyon, 2005, p. 7). This study focuses on the ability of an institution to have students re-enroll for the sophomore year after completing the first year.

Sense of belonging: The student’s subjective feeling of social acceptance by peers, faculty, and staff of their institution (Freeman, Anderman, & Jensen, 2007).

Sense of community: The subjective feelings that the students, faculty, and staff have social cohesion around some shared norms, beliefs, and values (Toma, 2003).

Social integration: “The interaction between the individual with given sets of characteristics ... and other persons of varying characteristics within the college,...[it] involves notions of both levels of integration and degrees of congruency between the individual and his (sic) social environment” (Tinto, 1975, p. 107). Social integration is developed through the formal and informal interactions student have with their peers, faculty and staff of the institution.

Supportive social environment: The campus setting in which personal bonds are developed between students, faculty, and staff to assist in the student's adjustment to college (Tinto, 1993).

Traditional student: A student who enrolls in a higher education institution almost immediately following high school graduation. Traditional students are 17 – 23 years of age.

Overarching Research Question

How do intercollegiate athletics formally contribute to the retention of first-time, first-year students at NCAA Division III member institutions sponsoring football?

Research Questions

- A. To what extent do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?
- B. How do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?
- C. To what extent are intercollegiate athletics formally incorporated in the retention practices of NCAA Division III institutions sponsoring football?
- D. In what ways are intercollegiate athletics included in the retention practices of NCAA Division III member institutions sponsoring football?
- E. How effective are retention practices involving intercollegiate athletics at NCAA Division III member institutions sponsoring football?

- F. What intercollegiate sports at NCAA Division III member institutions are most effective in the retention of first-time, first-year students sponsoring football?

Significance of Study

Previous research on intercollegiate athletics and the retention and persistence of students has focused on “big-time” intercollegiate athletic programs (Mangold, Bean, & Adams, 2003; Mixon & Treviño, 2005; Schurr et al., 1993; Tucker, 1992, 2004; Wann & Robertson, 2002). Additionally, the majority of the research has focused on the outcome of students remaining with the institution through graduation. Division III institutions with “small-time” intercollegiate athletics programs have largely been ignored. The current study focuses on these smaller institutions with intercollegiate athletics programs and the impact of intercollegiate athletics on the retention of their first-time, first-year students. This study contributes to the understanding of the extent to which intercollegiate athletics contributes to the retention of first-time, first-year students at smaller institutions sponsoring Division III programs. Additionally, the study provides intercollegiate athletic administrators and student affairs administrators with practical knowledge of how to incorporate intercollegiate athletics in their formal retention practices.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter contains a review of relevant literature regarding retention theories, retention practices, and the role of intercollegiate athletics in higher education. The first section provides a review of theories that have been utilized to develop practices of retention. Specific attention is given to the theories that lead to practices focusing on the campus environment. Recommended retention practices are also examined in the first section. The second section explores aspects of campus culture that influence the retention of students. Campus culture is influenced by the students and by the importance placed on specific aspects of the institution such as intercollegiate athletics. The final section examines the role of intercollegiate athletics in the retention of students. Specifically, the influences of intercollegiate athletics on student choices to attend institutions and to remain at those institutions are examined in this section.

Retention Theories and Practices

Retention Theories

Student retention in higher education has been studied for over forty years (Tinto, 2006-2007) as a sociological problem (Tinto, 1975, 1987, 1993), a psychological construct (Astin, 1984; Bean & Eaton, 2000, 2001-2002), and an interdisciplinary problem (Berger & Milem, 1999). Retention continues to be important to higher education institutions because it contributes to the institutions' financial viability.

Retention of students has been found to be linked not only to the attributes that students bring with them to these institutions but also with the adjustments that the students make to integrate with their campuses' academic and social cultures. This integration is connected to the amount of time and energy that the students put into their academic demands. Although the responsibility of integration falls predominantly on the student, institutions provide services such as academic skills centers and writing centers to assist the students in their academic achievement and student unions and intramurals to assist in social interactions. However, it is up to the student to expend effort to take advantage of these services.

Tinto's Student Integration Theory

Tinto's (1975, 1987, 1993) student integration theory attempted to explain how students integrate with their institutions and remain at their institutions, persist to graduation at another institution, or withdraw from higher education. The theory is grounded in two domains: academic and social. His theory states that students will persist in higher education if they are sufficiently integrated in both domains (Tinto, 1975, 1987, 1993). Academic integration is the degree to which a student adheres to the academic requirements of an institution to remain at that institution. An example is the maintenance of a minimal grade point average to avoid dismissal from the institution. Social integration is the degree to which a student interacts with peers, faculty, and staff of the institution within the formal and informal institutional environments.

Tinto (1975) introduced the aspect of commitment required for students to persist at the institution. Goal commitment is related to academic integration in that students

who are committed to a specific academic outcome (degree attainment, major) are likely to persist to achieve that goal. Goal commitment is more related to persistence, in which a student may leave a specific institution for another institution to attain a degree, than to retention, which is institution specific (Berger & Lyon, 2005). Institutional commitment, on the other hand, is related to retention to the specific institution because it is the degree to which a student is loyal to the institution and persists year to year at the institution through graduation. Institutional commitment is supported by both academic and social integration because students must adhere to the academic regulations of the institution and must be socially compatible with the campus life aspects of the institution.

Social integration is the ability of the students to integrate with their peers, as well as their faculty and staff of the institution (Tinto, 1975, 1987, 1993). Social integration as applied to faculty and staff refers to the informal interactions that students have with these institutional personnel rather than the formal interactions in the classroom or offices. Peer interactions occur throughout the collegiate experiences of students. At residential campuses, the residence halls offer opportunities for students to interact socially, whereas, at commuter campuses, students have opportunities to interact with their peers in campus recreation, student unions, and other structured environments on campus. Social integration reduces the chance of isolation on the campus and results in higher retention of students because the student who is socially integrated on campus is more likely to have feelings of a sense of belonging on the campus (Freeman, Anderman, & Jensen, 2007; Tinto, 1987, 1993). “[S]ense of belonging was found to be a significant predictor of both institutional commitment and intentions to persist” (Hausmann,

Schofield, & Woods, 2007, p. 830). Therefore, it is important that institutions provide opportunities for students to socialize with their peers, faculty, and staff (Tinto, 1993).

In addition to the integration of students on campuses, Tinto (1975) suggested that the commitment level of the students is a key component to their continuing at a specific institution. Tinto stated that commitment is formed by two attributes: goal commitment and institutional commitment. Students who are committed to obtaining a college degree are said to be “goal committed” because they will change institutions to complete their degrees if they determine that their current institution is not fulfilling their goals. However, students who are “institutionally committed” will remain at the same institution for their entire undergraduate degree program because they have achieved social integration and maintain at least the required minimum level of academic integration. The levels of commitment play heavily on the students’ decisions to persist at a specific institution. If “goal committed” students experience isolation at one institution due to the inability to integrate socially with their peers, faculty, and/or staff, then those students are more likely to leave the institution. Those students may persist in obtaining their degrees by transferring to other institutions. Some may decide to withdraw from higher education all together. Students who are institutionally committed display a degree of loyalty to their institutions. The institutionally committed students may display academic and social integration because they adhere to at least the minimal academic requirements to remain at their institutions and they have social interactions with peers, faculty, and staff at their institutions.

Braxton, Sullivan, and Johnson (1997) found empirical support of the social integration theory developed by Tinto (1975, 1987, 1993). Empirical support was found to support that “the greater level of social integration, the greater level of subsequent commitment to the institution” (Braxton, Sullivan, & Johnson, p. 112) and “the greater level of subsequent commitment to the institution, the greater the likelihood of student persistence in college” (Braxton, Sullivan, & Johnson, p. 112). Social integration, therefore, fosters institutional commitment. Institutions offer formal social opportunities through extracurricular activities such as intercollegiate athletics in which students interact with one another, faculty, and staff (Tinto, 1987).

Astin’s Student Involvement Theory

Astin (1984) developed the student involvement theory based on student behavior within the institution. Student involvement in the institution refers to the amount of “psychic and physical time and energy” (Astin, 1984, p. 301) students put into the various academic and social offerings, both formal and informal, at the institution. He suggested that students’ involvement at the institution would determine their willingness to remain at the institution because student involvement on campus develops “a strong identification and attachment to undergraduate life” (Astin, 1984, p. 302). “[I]nvolvement matters, and at no time does it matter more than during the first year of college when student attachments are so tenuous and the pull of the institution so weak” (Tinto, 2004, p. 120). Astin’s (1984) theory moves beyond the psychological construct of motivation towards the construct of behavior because a student may be motivated to become involved in some aspect of campus life but forgoes the opportunity in favor of studying.

A particular favorable aspect of Astin's (1984) theory is the ability to observe student behavior (i.e. monitoring student usage of writing centers, actual counts of attendance to intercollegiate athletics events).

Involvement is temporal and occurs on a continuum because students cannot be involved in every aspect of academics and campus life (Astin, 1984). Some students will expend more time and energy in studying for a subject than peers; others may expend more time and energy in campus life activities. Individual students will display higher levels of involvement in the same activity at different times during the semester. For example, a student may study chemistry for a greater period the day before an exam than when no exam is scheduled. Astin's (1984, 1985) theory is similar to Tinto's (1975, 1993) assertion that students must balance their academic integration with social integration to successfully persist at an institution. Astin (1985) reported that social involvement on campus led to persistence. One of the strongest influences on students is their peer group such that greater social and academic interactions with peers led to positive retention (Astin, 1996; Hausmann, Schofield, & Woods, 2007). Over involvement with academics with little social engagement could lead to social isolation that contributes to decisions to withdraw. Likewise, over involvement in social activities could lead to academic malintegration that could result in dismissal from the institution. (Astin, 1985; Tinto, 1993).

Astin's (1984) assertion of involvement occurring on a continuum is important to the use of intercollegiate athletics in retention practices. Student involvement in intercollegiate athletics occurs on a participant—spectator—uninvolved continuum.

Participants in intercollegiate athletics at most institutions are a small fraction of the student population. The large majority of students is composed of potential spectators of the intercollegiate athletics events. Therefore, intercollegiate athletics as spectator sports offers opportunities for students to become involved with their institutions

Incorporating Student Involvement Theory in Student Integration Theory

Berger and Milem (1999) studied the effect of student involvement on student integration. The study measured academic integration, social integration, institutional commitment, and involvement of first-time, first-year students over two semesters. The results of the study indicated that combining measures of perceptions and actual behaviors was useful in developing a model of persistence (Berger & Milem, p. 656).

[T]he interests of some of these students do not match well with what is offered at the institution and that a better job needs to be done by the institution in matching the needs of students with programs and services that are offered (Berger & Milem, 1999, p. 659).

The study found that noninvolvement in the fall semester was a negative predictor of academic integration, institutional commitment, and persistence to graduation (Berger & Milem, 1999). Social integration is also affected by noninvolvement (Braxton, Hirschy, & McClendon, 2004). “Peer involvement in the spring semester has statistically significant effects on academic integration, ...social integration, ... and subsequent institutional commitment” (Berger & Milem, 1999, p. 655). Involvement in campus life aspects increases the academic and social integration of students. Early involvement in

the fall semester is significant to the development of social integration and institutional commitment (Braxton, Hirschy, & McClendon, 2004).

Psychological Model for Student Retention

A psychological model for student retention was developed by Bean and Eaton (2000, 2001-2002) with a desire to explain the motivation of first-time, first-year students. “Past behavior, beliefs, and normative beliefs affect the way a student interacts with the institutional environment...beliefs arise from initial preparations and assessments of personal characteristics – that is, from the entry characteristics of a student” (Bean & Eaton, 2000, p. 56). “While interacting with the college environment and its many different features, the student engages in a series of self-assessments that can be described by several psychological processes” (Bean & Eaton, 2001-2002, p. 75). The model combines self-efficacy theory, coping behavior theory, attitude-behavior theory, and attribution theory to explain how students interact within the institutional environment, both academically and socially. The student uses these self-assessments to inform feeling of integration in the institution with the experiences at the institution (Bean & Eaton, 2001-2002). Positive psychological outcomes in self-efficacy, stress reduction, academic and social efficacy “lead to academic and social integration, institutional fit and loyalty, intent to persist, and to...persistence” (Bean & Eaton, 2000, p. 56).

Retention Practices

One of the leading causes of student departure is poor integration into the academic and/or social environments of the institution in the first semester of college.

Tinto's (1987, 1993) model does not attempt to explain individual departure as do the theories advanced by Astin (1984), and Bean and Eaton (2000). Rather, Tinto's (1987, 1993) focus on the formal and informal institutional environment and the student, faculty, and staff interactions within that environment. "[T]he model seeks to explain how interactions among different individuals within the academic and social systems of the institution lead individuals of different characteristics to withdraw from that institution prior to degree completion" (Tinto, 1987, p. 113). Tinto's (1987, 1993) model serves the practice of institutional retention efforts by identifying areas within the institutional environment (e.g. promoting intercollegiate athletics event attendance) that could be changed to improve the retention of students (Bean & Eaton, 2001-2002).

Tinto's Principles of Effective Retention Practices

Tinto (1993) offered principles to guide effective retention strategies at universities. These principles have been utilized as criteria for "exemplary retention programs" (Braxton, Hirschy, & McClendon, 2004, p. 54). The first principle states that the institution must be committed to the service of its students' welfare (p. 146). This principle applies to all members of the university and the way in which they interact with students. The principle implies that the university is a community that must be conscious of its interactions with its members and treatment of individuals. Tinto (1993) asserted that adherence to this principle leads to student institutional commitment which is a basis for the student's persistence at the university.

The second principle states that institutions must be committed to the education of all of their students (Tinto, 1993, p. 146). The retention program is first and foremost

committed to the educational mission of the university. This principle requires faculty commitment to student learning by altering their delivery methods of knowledge and their methods of providing feedback to students who have different learning styles to enhance learning opportunities for all of their students.

Tinto's (1993) third principle states that the retention program must have a commitment "to the development of supportive social and educational communities in which all students are integrated as competent members" (Tinto, 1993, p. 147). This principle is founded on Tinto's (1975, 1987, 1993) assertion that students who persist with the university are academically and socially integrated within the institution. Therefore, the retention programs and practices of the institution should enhance these opportunities for all students. "They [effective retention programs] consciously reach out and make contact with students in a variety of settings in order to establish personal bonds among students and between students, faculty, and staff members of the institution" (Tinto, 1993, p. 147). These personal bonds through social integration foster institutional commitment in the students, which leads to their persistence with the university.

Recommended Retention Practices

Effective retention practices require institutions to develop strategies and programs that foster academic integration and social integration. Thomas (1990) contended that practices fall into three categories: "admission/recruiting activities and practices; activities promoting student academic integration; and activities promoting student social integration" (p. 187). Braxton and McClendon (2001-2002) contend that

some retention practices that foster academic integration also foster social integration. Additionally, following Tinto's (1993) guidelines, effective retention practices should foster the complete integration of the student rather than one aspect. For this reason, the following review of retention practices for first-time, first-year students will consider student integration rather than separate integration in the academic and social domains of the institution.

The interactions between faculty and students in and out of the classroom are important to the academic integration of the students, particularly early in the first semester of college (Tinto, 2004). Classroom discussions and performance feedback assist in the academic development of the student. Outside the classroom, faculty practices of involving students in research (Light, 2001; Thomas, 1990) or employing student assistants (Thomas, 1990) further integrate students in the academic environment of the institution. Academic integration is promoted through the offering of academic support programs such as academic skills assistance (Hossler & Anderson, 2005) or supplemental instruction (Martin & Hurley, 2005). Students in need of tutoring or alternative learning strategies enhance their abilities to succeed at the institution by taking advantage of these services (Thomas, 1990; Tinto, 1993).

Academic advising for first-time, first-year students is essential for the academic integration of the students (King & Kerr, 2005). Effective academic advising requires advisors to understand the transition that first-time, first-year students experience and to assist the students in developing academically at the institution. A significant role of the academic advisor of first-time, first-year students is to assist those students with

becoming academically integrated with the institution. This requires advisors to meet with their students more frequently than registration periods (Braxton & Mundy, 2001-2002). Braxton and McClendon (2001-2002) recommended advisors encourage their students to enroll in courses in which the faculty require high levels of classroom discussions and to become involved with campus organizations. These recommendations increase opportunities for student involvement (Astin, 1984; Tinto, 2004).

First-time, first-year students are often reluctant to approach faculty. To alleviate this reluctance, Baird (2000) suggested a practice of providing students information on how to approach faculty. Such a practice would develop the academic integration and social integration of students by giving them strategies for connecting with their faculty. In similar fashion, Braxton and McClendon (2001-2002) recommended that student affairs offer seminars addressing stress management. Strategies for coping with the stress of transitioning to a new environment will assist students in their abilities to acclimate to the institution. The seminars should be held early in the semester before exams and research papers become an issue for the students (Braxton & McClendon, 2001-2002).

A practice being utilized at many institutions is the offering of first-year seminars (Hunter & Linder, 2005). The seminars are developed around the development of students through academic skills curricula, social interactions, and, often, academic advising. The practice of these seminars assists students with their transition from high school to college (Tinto, 1993). The first-year seminar is an example of practice that fosters the complete integration of the student into the institution (Hunter & Linder, 2005). Another practice that fosters the complete integration of students is the

coordination of learning communities. “Learning communities—clusters of courses organized around a curricular theme that students take as a group—strengthen and enrich students’ connections to each other, their teachers, and the subject matter they are studying” (Laufgraben, 2005, p. 371). These programs achieve student integration by offering students opportunities to interact with one another in informal settings such as residential halls and in the classrooms.

As students enter the institution, they are faced with numerous challenges. Dennis (1998) indicated that the first six weeks of the first semester of college are critical to their continued enrollment. New student orientation is considered

...the college’s best opportunity to introduce a strong learning environment, build the foundations for academic success, welcome students and families to the campus community, promote student interactions with faculty and staff, and convey the values and traditions of the new institution (Mullendore & Banahan, 2005, p. 391).

Braxton and McClendon (2001-2002) recommended that orientation programs offer numerous activities such as group learning activities in which first-time, first-year students can interact socially with peers that foster student integration. The orientation program should, and often does, continue beyond the first days of enrollment (Thomas, 1990; Tinto, 1993). By continuing the orientation program through the first semester or first year, the institution assists students with issues that may arise during the students’ transition to college. These practices have been found to have a strong effect on improving retention (Patton et al., 2006; Thomas, 1990). A recommended orientation practice is to develop activities and programs to enhance “cross-clique diversity”

(Thomas, 2000, p. 609) that would assist the students in developing relationships in the institution more broadly. The broader relationships develop larger social networks and improve the connectedness to the campus, which is linked to student intentions to persist.

The orientation program offers students opportunities to become a part of the campus culture and develop loyalty for the institution through the introduction of traditions and rituals at the institution (Siegel, 2007). It is during orientation at Texas A&M University that students are introduced to the “Midnight Yell” (Aggie Traditions, n.d.). The “Midnight Yell” is a tradition at the university in which students gather in the football stadium the night before a home football game to practice cheers. The orientation program featuring the “Midnight Yell” is one example of an intentional practice incorporating intercollegiate athletics in the retention program of a university.

Aside from the Texas A&M example, intercollegiate athletics are largely ignored in retention practices for first-time, first-year students. Intercollegiate athletics, as a spectator activity, provides social interaction opportunities with peers, faculty, and staff. Tinto (1993) reported that one institution provided faculty with special jackets to foster informal interactions with their students at athletic events. The intercollegiate athletics program of many institutions offer opportunities for students to become acquainted with the campus culture through the traditions and symbols of the institution. Therefore, intercollegiate athletics have potential as a retention strategy for the students attending events as spectators.

Campus Culture

Campus culture “consists of the shared beliefs, values, assumptions, and ideologies that bind a group together” (Toma, Dubrow, & Hartley, 2005, p. 6). Institutions throughout the years have developed their campus cultures to signal the importance of various aspects of the institution. Campus culture is also utilized in defining what is considered appropriate behavior of the students, faculty, staff, and alumni (Kuh & Whitt, 1988; Toma, Dubrow, & Hartley, 2005).

Various subcultures of students, faculty, and staff exist within the campus culture. These subcultures are defined by “persistently interacting with one another over a period of time” (Kuh & Whitt, 1988, p. 37). The subcultures are distinct groups of individuals who share many of the same values, beliefs, and norms.

Students perceive “communal potential” (Braxton & Hirschy, 2004, p. 95) on the campus through their interactions with the student subcultures. “Communal potential refers to the degree to which a student perceives that a subgroup of students exists within the college community with which that student share similar values, beliefs and goals” (Braxton & Hirschy, 2004, p. 95). Social integration requires integration with peers, faculty, and staff; communal potential focuses on peer interactions to develop social integration in smaller groups (Braxton & Hirschy, 2004). Students must perceive communal potential before they can become socially integrated with their institution.

Student Subcultures

Administrators and researchers have developed and utilized student typologies in attempts to understand better the subcultures of their students (Toma et al., 2005).

Although students cannot be easily separated into distinct categories and typologies are often generalizations of student groups, they offer administrators and researchers opportunities to study how students engage with their institutions (Flacks & Thomas, 2007; Toma et al., 2005). Administrators need to understand the student types at their institutions for retention efforts because “student peer groups differ widely in their orientation” (Flacks & Thomas, 2007, p. 188) toward their institutions (Flacks & Thomas, 2007; Kuh et al., 1991).

Horowitz (1987) identified three distinct student subcultures that have developed since the eighteenth century. These subcultures are “college life,” “outsiders,” and “rebels.” These contrast to the four subcultures (collegiate, academic, vocational, and rebel) identified by Clark and Trow (1966) that are outlined below.

Clark and Trow (1966) have been cited in a number of studies for their typology of four student subcultures. The subcultures found were academics, non-conformists, vocational, and collegiate. Academics were found to have strong foci on their studies and high loyalty to their institutions. Non-conformists were found to be similar to the academics in their focus on academic work but displayed little loyalty to the institutions. The vocational group displayed little involvement with their academic work and little loyalty to their institutions. The major focus of this group was the outside employment of the students. The collegiate group was found to have low levels of academic focus with high loyalty levels to the institutions. These were said to do just enough academically to stay in school but were more interested in social activities, such as spectator events involving intercollegiate athletics, afforded them on campus. Student typologies have

changed somewhat over the past four decades and revisions have been suggested (Horowitz, 1987; Kuh, Hu, & Vesper, 2000).

A more recent study of students proposed ten subcultures that provide opportunities for more detailed distinctions (Kuh, Hu, & Vesper, 2000). Developed from a large scale longitudinal study of students and derived from what students reported doing in their college experiences, the typology categorized the students groups as disengaged, recreator, socializer, scientist, artist, intellectuals, individualist, grind, collegiate, and conventionals. Disengaged students spent less time studying and interacting with their peers. This group of students was the largest portion of all undergraduate students in the typology. Recreators spent significantly more time involved in sport and exercise activities. These students, primarily male students, also spent less time in co-curricular activities and in social interactions with their peers. Social and substantive interactions with peers distinguished the socializer group. This group reported less involvement in co-curricular activities and in sport and exercise activities.

The scientist group spent much more time involved in scientific study and in faculty interactions (Kuh, Hu, & Vesper, 2000). The amount of time studying and engaged in academic pursuits distinguished these students. The frequent interactions with faculty are expected due to the amount of time devoted to laboratory work. Artists, like the scientists, were distinguished by their participation in the specific arts fields and their frequent interactions with their faculty. The substantive faculty interactions are expected in the arts because students tend to work closely with their faculty on projects. Intellectuals displayed above average levels of involvement and effort in all activity

factors studied. Kuh, Hu, and Vesper (2000) suggested that these students get more out of college than other students do.

The individualist group was distinguished by their substantive interactions with their peers and their lack of interactions with faculty. Whereas, the students in the grind group were distinguished by their level of effort towards academics coupled with their lower amount of time spent on academic work. They also displayed characteristics of the vocational group of Clark and Trow (1966); these students reported working thirty or more hours per week in addition to attending classes. Students in this group did not engage in activities on campuses beyond academics to a significant degree.

The collegiate group displayed more involvement in co-curricular activities than any other group (Kuh, Hu, & Vesper, 2000). This group, made up of a large number of women and seniors, reported less involvement in cultural activities and science activities. The conventional group reported spending an above average amount of time engaged in sport and exercise, social interaction with peers, and academics. It was suggested that this group represented a majority of first-time, first-year students.

Incompatibility with the dominant subcultures on a campus can develop feelings of isolation and incongruence in students (Kuh et al, 1991). Campus practices and policies should recognize that different sub-groups of students require different services to reduce isolation and increase retention (Berger & Milem, 1999; Kuh, Hu, & Vesper, 2000). Campuses emphasizing social activities may isolate students who wish to pursue more seriously their academics endeavors. A student such as this likely would transfer to another institution with a campus culture advocating more serious academic pursuits.

The student culture on campuses contributes to the retention of students because it affects students' perceptions of communal potential and subsequent social integration (Braxton & Hirschy, 2004). Institutions have the ability to direct the culture of their respective campuses in the acceptance of students and through the provision of activities and resources. Campus policies and practices can "induce students to spend time doing productive things while in college" (Kuh, Hu, & Vesper, 2000, p. 239). With respect to the acceptance of students, the student subcultures on a campus present new students with different forms of communal potential that can lead to the social integration of students with their peers and faculty.

Intercollegiate Athletics in Campus Culture

One of the influences of the campus culture is the intercollegiate athletics program of the institution. Intercollegiate sport began as student initiated activities to add to the life of the campus beyond just academics (Chu, 1985; Smith, 1988). In efforts to gain control of the students and to reduce the possibility of governmental intrusion in higher education, institutions took over the athletic programs and formalized them as part of the college experience (Chu, 1985; Smith, 1988). At some institutions, the administrations intentionally used the athletic programs as a means of improving campus unity and campus life for the students, even for those students not participating in the sports (Chu, 1989; Rudolph, 1968). Colleges and universities are expected to continue the tradition of offering intercollegiate athletics as part of the campus experience. Much of this expectation is derived from the societal perceptions that intercollegiate athletics have value beyond that of entertainment (Coakley, 2001).

A major emphasis in college life is the building of community on the campus. Sport is often described as a force in society that can achieve unity amongst diversity. Lever (1983) and Wann et al. (2001) asserted that spectator sport is effective in unifying masses. “In spectator sports we have a popular form of mass entertainment with the power to create order amid diversity” (Wann et al., 2001, p. 192). Boyer (1987) implied that spectator sport, not participatory sport, fostered community building on campuses. Students develop communal bonds with their peers and others by attending intercollegiate athletic events as spectators. Duderstadt (2000) and Toma (1998, 2003) reinforced this assertion in their respective works about intercollegiate athletics and football at large universities. On smaller campuses, the community building effects may be greater because the proportion of students actively involved in intercollegiate athletics as participants is typically higher than what is found on large campuses.

As it relates to retention of students in higher education, the expectation of offering intercollegiate athletics is important because they serve to reinforce the campus culture. “[S]pectator sports provide a powerful tool for institutions to build and express identification and culture” (Toma, 2003, p. 187).

It was the happy accident of sport...that student involvement in the life of the institution was engendered. And it may be that school sport, not only for the athlete but also for the spectator, remains a particular American means of gaining student involvement in the life of the college (Chu, 1989, p. 161).

The issues of student integration and involvement are important in the relationship that intercollegiate athletics have with retention. The primary issue is the

adaptation of students to develop a sense of belonging on the campus. Students who do not value intercollegiate athletics as participants or spectators will not likely persist at institutions heavily promoting spectator sports. To maximize the impact of intercollegiate athletics on the retention of students, the institution must develop a comprehensive plan of action to address who the students are and what they value. If the participation in sport activities is valued over the spectatorship of sport, then the institution should consider reducing the emphasis on intercollegiate athletics. However, if the opposite is true, then the promotion of the spectatorship of the institution's programs should be increased with greater opportunities for students to attend the spectator events (e.g. increase student seating capacities).

Intercollegiate Athletics and Student Retention

The retention efforts that institutions practice begin with the admissions process. Colleges and universities admit students who are deemed capable of succeeding at their institution. Students then select the institutions to which they enroll. The marketing efforts of colleges and universities vary, but there is evidence that intercollegiate athletics programs can influence potential students' decisions to apply, to accept admittance, and to enroll.

Intercollegiate Athletics and Admissions

Intercollegiate athletics plays a unique role at institutions by providing advertising exposure to prospective students (Bremmer & Kesselring, 1993; Toma, 2003). “[C]ollege sports bring universities to the attention of prospective students in ways that appeal to many. Participation in college sports for most students is not as student-athletes. Instead

... [most] students are spectators” (Toma, 2003, p. 234) of intercollegiate athletics events. Intercollegiate athletics is part of the marketing efforts institutions utilize to attract students to their campuses (Goff, 2000; Toma, 2003). Sponsoring Division I intercollegiate athletics is particular effective advertising for attracting out-of-state students (Mixon & Hsing, 1994). Through the media coverage of intercollegiate athletics, institutions gain the opportunity to expose their names to potential students and to market their distinctive academic programs and campus life opportunities (Goff, 2000; Toma, 2003).

The advertising effect of intercollegiate athletics on the number of applications has been debated since the 1980s when Boston College experienced a surge in the number of applications following the 1985 Rose Bowl for the institution (Sperber, 2000; Tomasini, 2005). During the following year, the institution received more applications over the previous year. The phenomenon was dubbed the “Flutie Factor” because Boston College player Doug Flutie threw the winning touchdown pass in the final seconds of the game and resulted in the generation of national media exposure (Sperber, 2000). Flutie earned more national media attention for Boston College in 1985 when he was awarded the Heisman Trophy (Tomasini, 2005). Applications to the institution increased by approximately twenty-five percent in 1986. The positive attention that institutions receive from intercollegiate athletics success can influence some students’ decisions to apply to an institution (Toma & Cross, 1996).

Successful intercollegiate athletics programs at the Division I level have been found to influence students’ choices in the application process (Bremmer & Kesselring,

1993; Goff, 2000; Toma, 2003; Toma & Cross, 1996, 1998). Championship seasons in football have been found to be more influential than basketball championships on the total number of applications to institutions (Toma & Cross, 1998). However, the University of Connecticut experienced significant increases in out-of-state applications following successful men's and women's basketball seasons in the 1990s (Toma, 2003).

Winning a football championship at the lower divisions of the NCAA do not influence the number of applications or enrollment (Daughtrey, 1998). Media coverage of these championships is not the same as for the Division I-A media coverage. Thus, the advertising effect of the championship is influential on student choice to apply to the institutions even though the institutions utilize the championships in their advertising and recruiting efforts (Daughtrey, 1998).

Changes in intercollegiate athletics programs have yielded mixed enrollment results (Goff, 2000). Adding football at Georgia Southern University is credited for the institution's increased enrollment by approximately 500 students (Goff, 2000). Institutions that reclassify from lower competitive levels (Divisions II and III) to the higher competitive level of Division I-AA have not experienced increases in applications and enrollment (Tomasini, 2003, 2005). On a negative side, the elimination of football at Wichita State University and the University of Texas at Arlington has been held responsible for decreases in enrollment of about 600 students at both institutions (Goff, 2000).

The impact of intercollegiate athletics on students' application choices and subsequent acceptance of offers of admittance is important to the retention of the

students. Institutions marketing through intercollegiate athletics need to offer experiences that students will perceive positively. “A positive impression of intercollegiate athletics by the general student population can play a role in student satisfaction and retention” (Potter, 2000, p. 16). As described previously, the students’ perceptions of the communal potential on campus and the ability to develop a sense of belonging with peers influence the students’ abilities to achieve social integration (Braxton & Hirschy, 2004).

Student Retention and Intercollegiate Athletics

The majority of research conducted on retention and intercollegiate athletics has focused on the athletes and their retention through graduation at their initial institutions. Longitudinal studies by Shulman and Bowen (2001) and by Bowen and Levin (2003) addressed the persistence and academic advancement of student-athletes at Ivy League institutions and other institutions with excellent academic reputations. In both studies, athletes were found not to perform academically at their expected levels and were found to perform academically below their peers. Hyatt (2003) studied the advising received by African American male athletes and found that the focus was on the academic progress of the student as mandated by the NCAA. The academic progress mandated requires that a student-athlete be progressing toward a degree. This mandate is an attempt to prevent athletes from taking introductory level courses throughout their years of athletic eligibility. Hyatt (2003) found that the social integration and other aspects of student development were largely ignored by the athletes’ advisors. She speculated that the lack of social integration could lead to lower levels of persistence in these athletes.

Additional research has been conducted on the influence of intercollegiate athletics has on the campus culture (Beyer & Hannah, 2000; Boyer, 1987; Cady, 1978; Chu, 1985, 1989; Kuh et al, 1991; Toma, 1998, 2003). “[S]pectator sports provide a powerful tool for institutions to build and express identification and culture” (Toma, 2003, p. 187). Chu (1989) suggested that college sports initiated student involvement on campuses. College sport began as a student initiated activity but was brought under institutional control to govern the safety of the participants and to prevent professional athletes from participating in the events (Chu, 1985). Spectator sport has remained as a particular means by which students become involved with their campuses (Chu, 1985). Since the time of assuming control of intercollegiate sports, colleges have used their intercollegiate athletic programs to enhance and develop the community of their campuses (DiMaria & Pullano, 2004; Gerdy, 2002; Simon, 2004; Toma, 2003). Spectator sports have a particular influence on large campuses in building community amongst the diverse student population (Boyer, 1987). Communal bonds are developed through the attendance of large scale athletic events (Duderstadt, 2000; Toma, 1998, 2003). Through these communal bonds, students socially integrate with peers, alumni, faculty, staff, and external constituents associated with the institution through the intercollegiate athletic events.

Spectator Motivation

Students attend intercollegiate athletics events for a variety of reasons. Wann et al. (2001) stated that spectators have eight motives for attending events: Diversion, entertainment, self-esteem, eustress, economic gain, aesthetic value, family ties, and

affiliation needs. Through the analysis of a national survey, Milne and McDonald (1999) developed thirteen constructs of sport motivation based on Maslow's (1982) hierarchy of needs. The constructs are physical fitness, risk-taking, stress reduction, aggression, affiliation, social facilitation, self-esteem, competition, achievement, skill mastery, aesthetics, value development, and self-actualization. Within the context of this study on the use of spectator sports in retention practices at universities, the constructs of affiliation needs (Wann et al., 2001) and social facilitation (Milne & McDonald, 1999) are valuable. This need of affiliation is often strong amongst first-time, first-year students at colleges and universities because they are developing new relationships with their peers, faculty, and staff at their institutions. First-time, first-year students need to perceive a sense of belonging at the institution if they are going to persist to graduation at their institution. "People like to be a part of something, to feel that they belong" (Green & Costa, 2007, p. 227). This need of belonging can be satisfied by attending sports events with others (Shank, 1999). "Spectators' ... involvement in sport is motivated by a desire to confirm their sense of identity ... and are motivated by the chance to spend more time with family members, friends, and business associates" (Milne & McDonald, 1999, p. 24). Students often associate their sense of belonging at their colleges and universities through their institutions' sports teams (Green & Costa, 2007).

Watson and Rich (2000) revealed six sports spectator typologies: players, patriots, appreciators, socialites, friends, and voyeurs. Patriots display "high levels of patriotism for the city, state or country" (Watson & Rich, 2000, p. 13) and "view sports as a means of establishing community and national pride" (Fullerton, 2007, p. 286). This spectator

type can be found when the spectators view the intercollegiate athletic program as a means to build institutional loyalty and the campus community of students, faculty, staff, and alumni. The socialite attends sport events as a means to interact with friends (Watson & Rich, 2000). These spectators may have little interest in the sport event itself, but they attend to satisfy “a social need” (Watson & Rich, 2000, p. 19) of affiliation. Students may attend intercollegiate athletics events to interact with their friends. Boyle and Magnusson (2007) found “students appeared to require the presence of friends to derive value from attending a game” (p. 514).

The spectator type that may hold significance to intercollegiate athletic programs in Division III is the “friends” (Watson & Rich, 2000, p. 22) typology. The motivation for these spectators to attend the events is “to provide moral support for friends and family” (Watson & Rich, 2000, p. 22). Students at the colleges and universities are possibly classmates or residence hall neighbors with students who participate in intercollegiate athletics. The strength of the relationship determines the level of support these spectators give their friends (Watson & Rich, 2000). The motivation of supporting friends is potentially strong for the intercollegiate athletics programs.

Research on Intercollegiate Athletics and Retention

Little research has been conducted on the impact that the development of the communal bonds through intercollegiate athletics have on the retention and persistence of the students who are spectators (Potter, 2000). Tucker (1992, 2004), Mangold, Bean, and Adams (2003), and Mixon and Treviño (2005) used aggregate data from national sources to study the impact of athletic success on the retention rates and graduation rates of

NCAA Division I institutions. The results of these studies have yielded inconclusive results. Schurr et al. (1993) monitored student attendance at basketball games and persistence at a mid-western university. Wann and Robertson (2002) surveyed students on their intent to graduate and their level of identification with their intercollegiate athletics teams. Potter (2000) and Weatherall (2006) examined the role of intercollegiate athletics in retention and persistence at small to moderate sized institutions.

Tucker (1992) found negative effects from football success but no effect for basketball success. Due to the limited arena capacities for student seats at basketball games, Tucker (1992) suggested that fewer students would be negatively affected by their attendance at games. One weakness to Tucker's suggestions, when applied to retention of first-year students, is that the sports occur in different semesters. Football occurs in the fall semester and concludes before or during final exams except in the case of teams participating in New Year's Day bowl games. The first-time, first-year students are affected during their first semester of college, a critical time for the development of academic integration (Tinto, 1993). Basketball occurs primarily during the spring semester with the national tournament concluding by the first week in April. Therefore, the students who are attending the basketball games to the detriment of their academics have about one month to "turn things around" and remain in school.

Mangold, Bean, and Adams (2003) found negative effects on overall retention of students from the success of football teams and basketball teams at the NCAA Division I level. The researchers suggested that the student spectator involvement with the teams through attending games, traveling to away games, and other activities associated with

the games (tailgating, parties following games, etc.) led students to neglect their academic work.

Tucker (2004), using a different measure of football success, found a “significant positive statistical relationship between big-time football success and overall graduation rates” (Tucker, 2004, p. 661) of all students over a six year period. The results from this study suggest that successful football programs would have a positive relationship with retention rates because graduation rates are directly related to the retention rates. Similar to Tucker’s (2004) findings, Mixon and Treviño (2005) found that football success had a positive relationship with first-time, first-year student retention rates. The researchers suggest that intercollegiate football adds to the students’ enjoyment of the institution and that they continue at the institution for the entertainment that is provided by the teams (Mixon & Treviño, 2005; Tucker, 2004).

Schurr et al. (1993) examined the behavior of students attending basketball games at Ball State University and their subsequent graduation from the institution. The results from the study indicated that the students attending the games were more likely to remain at the institution than those not attending games during their first year. This may be due to the social integration of the students attending the games which is consistent with Tinto’s (1975, 1993) theory that social integration leads to institutional commitment. Schurr et al. (1993) make a significant contribution to the literature with this study because they examined the actual behavior of individual students. By utilizing the specific attendance records and matching them to the persistence of individual students, the researchers were able to determine the impact of basketball attendance on persistence.

This is an advantage over the use of aggregate data for the institution. However, the results of the study cannot be generalized to other institutions because Ball State University is not representative of every institution.

Wann and Robinson (2002) found that “identification (i.e., the psychological connection fans feel with their team)” (p. 36) with an institution’s intercollegiate athletic teams were positively related to undergraduate students’ retention. Analysis of student identification with the institution’s football and men’s basketball teams revealed a strong relationship with the intention to persist at that institution. Additional research indicated that identifying with the overall intercollegiate athletics program of the institution was positively related to persistence at the institution.

Some liberal arts colleges use intercollegiate athletics to boost enrollment and retention rates of their institutions (Weatherall, 2006). Although Division III institutions are not required to report separated graduation rates of athletes and non-athletes, Oberlin College indicated that the retention rates for athletes is consistent with the retention rates of the general student body (Weatherall, 2006). Administrators have indicated that intercollegiate athletics can improve the overall retention rates of institutions because athletes are assumed to be retained at higher rates than non-athletes (DiMaria & Pullano, 2004; Weatherall, 2006).

Students indicated that intercollegiate athletics played “an important role in campus life” (Potter, 2000, p. 33) at three small-moderate size, private church related institutions in Oklahoma that did not sponsor football. Potter (2000) found that students, other than student-athletes and international students, did not indicate intercollegiate

athletics as an important role in their decisions to remain at their institutions. Overall, intercollegiate athletics had little effect on retention.

Summary

The literature of retention theories and practices informs the research on retention and the role of intercollegiate athletics. Much of the literature on retention theory is older than ten years, but the seminal works of Tinto (1975, 1987, 1993) and Astin (1984) have informed much of the research on student retention. The majority of more recent literature has focused on the student's interactions with the campus environment. The current study's focus is the intercollegiate athletics program, a significant part of the campus environment. In his work, Tinto (1993) addressed the institution's capability to direct change within the campus environment, and subsequent research has found support for Tinto's theory (Braxton, Sullivan, & Johnson, 1997). For this reason, this study relies heavily on his theory.

The review of literature does not reveal comprehensive knowledge of the use of intercollegiate athletics in retention practices, particularly at smaller institutions. Although intercollegiate athletics have been found to influence the admissions process, overall retention rates at large institutions, and retention of student-athletes, the intentional practice of including intercollegiate athletics in retention efforts for the general student body has not been explored. The current study adds to the literature and knowledge of the role of intercollegiate athletics in the retention practices of small institutions.

CHAPTER III

METHODS

The purpose of this study is to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs. A descriptive approach to studying intercollegiate athletics and retention was utilized. This chapter describes the research design including the participants, pilot studies, procedures, instrument, and analyses to be used in the study.

Research Design

A descriptive survey design was utilized in this study. The survey approach for this study was appropriate because it generated data from the entire participant population in a large geographic region (Mertens, 1998). Additionally, surveys are appropriate for examining current practices and opinions within a specific population (Thomas & Nelson, 1996). The study generated data on the specific retention practices intentionally incorporating intercollegiate athletics and obtained the opinions of student affairs administrators of NCAA Division III member institutions with football regarding the effectiveness of those practices, the extent to which intercollegiate athletics contribute to the social integration and to the retention of first-time, first-year students. Data were also generated on the effectiveness of the overall intercollegiate athletics programs and ten specific intercollegiate sports in the retention of first-time, first-year students.

The review of literature suggests that social integration of first-time, first-year students is influenced by six variables: a sense of community, a sense of belonging to an institution, a supportive social environment, interactions between students and faculty, interactions between students and staff, and interactions between students and their peers. Questions related to these six variables were developed to address the research question: How do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions?

First, the extent to which intercollegiate athletics contribute to each of the six variables and to social integration at the institutions were rated using a 5-point scale. Then, the participants were asked to describe how intercollegiate athletics contribute to each of the six variables at their institutions.

Retention practices that specifically incorporate intercollegiate athletics at NCAA Division institutions are largely unknown. Participants in the study were asked to describe the practices incorporating intercollegiate athletics at their campuses and to rate the extent to which they use intercollegiate athletics in their retention practice and the effectiveness of the described practices. Participants were also asked to rate the effectiveness of ten specific sports (volleyball, women's soccer, women's basketball, women's ice hockey, softball, football, baseball, men's soccer, men's basketball and men's ice hockey) in the retention of first-time, first-year students at their institution.

Participants

The population for this study was comprised of the 242 deans of students at four-year degree granting institutions sponsoring NCAA Division III intercollegiate athletics

with football. Participants without football were excluded from the study because the sport at larger institutions is presumed to have a positive influence on the campus culture, a major factor in retention of first-time, first-year students (Toma, 2003). Football often has the largest number of students on a team compared to other teams at an institution. Thus, the team size could have an influence on the retention of first-time, first-year students who participate on those teams. Because the size of the population was small, the entire population was invited to participate in the on-line survey for this study. A total of 112 (46.3%) individuals responded to the survey; 88 (36.4%) participated in the study by responding at least one item and 24 (9.9%) opted out of the study. Of the 88 participants, 86 (35.5%) were determined to be useful in the study.

Online Survey Response Rates

Research on the use of online surveys indicates that the successful usage may be dependent on the survey sample. Lower response rates were found in the online survey of faculty at Southeastern colleges and universities (Shannon & Bradshaw, 2002). Higher response rates were found in surveys of education administrators (Glover & Bush, 2005) and of athletes (Lonsdale, Hodge, & Rose, 2006). In their study comparing response rates and response times of online survey and mail surveys of university and college faculty, Shannon & Bradshaw (2002) found that the Internet based survey had a lower response rate (22%) than the response rate for the mailed survey (44%). The advantage found in the use of the Internet survey was in the response time. “[I]t took an average of 9.13 days to receive survey response by postal mail, compared with 3.21 days for the initial electronic surveys” (Shannon & Bradshaw, 2002, p. 185). Lonsdale, Hodge, and Rose

(2006) found an insignificantly higher response rate of an online survey (57.07%) than for a mailed survey (46.63%). Similar to Shannon and Bradshaw (2002), a significantly quicker response time was found using the online survey (M=7.26 days, SD=6.90 days) than for the mailed survey (M=13.73 days, SD=7.19 days). Glover and Bush (2005) concluded “that the response rate is greater where a targeted e-survey, rather than a postal survey, is used in similar circumstances” (p. 143).

Instrument

A 47-item on-line questionnaire was utilized in the study. Thirteen items were related to the contributions intercollegiate athletics make to social integration. Thirteen items were related to the intentional incorporation of intercollegiate athletics in retention practices. Campus demographics were obtained through sixteen items, and individual respondent demographic data were obtained through five items. The following details the content of each section of the questionnaire. The complete instrument is found in Appendix A.

Intercollegiate Athletics Contributions to Social Integration

Respondents rated the extent to which intercollegiate athletics contribute to developing social integration at their institutions using seven five-point rating scales developed by the researcher. The rating scale is shown in Table 1. The overall contribution of intercollegiate athletics to developing social integration and six variables (developing a sense of community, developing a sense of belonging, developing a supportive social network, facilitating interactions with faculty, facilitating interactions with staff, and facilitating interactions with peers) were rated with the five-point scales.

For each of the variables, respondents were asked to list up to three specific ways intercollegiate athletics contributed to the variable.

Table 1

Rating scale utilized in study

| Not at All | Very Little | Somewhat | Very Much | Absolutely |
|------------|-------------|----------|-----------|------------|
| 1 | 2 | 3 | 4 | 5 |

Retention Practices Incorporating Intercollegiate Athletics

Respondents were asked to rate the extent to which intercollegiate athletics were incorporated in their retention practices of first-time, first-year students with a five-point scale. Respondents answering “Not at All” were redirected to ratings the effectiveness of their intercollegiate athletics in retaining first-time, first-year students. These respondents skipped the open-ended items regarding descriptions of retention practices incorporating intercollegiate athletics. The respondents answering “Very Little” to “Absolutely” were directed to items requesting them to describe up to three retention practices intentionally incorporating intercollegiate athletics. They were then asked to rate the effectiveness of each described practice. And the overall effectiveness of all described retention practices.

Effectiveness of Intercollegiate Athletics in Retaining First-Time, First-Year Students

Respondents used two items to rate the effectiveness of their intercollegiate athletics programs in retaining first-time, first-year students. The first item rated the effectiveness of the overall intercollegiate athletic program of the respondent’s institution

using the five-point scale described in Table 1. The second item requested rating of the effectiveness of ten specific sports: Football, women's basketball, men's basketball, volleyball, women's soccer, men's soccer, baseball, softball, women's ice hockey, and men's ice hockey. A six-point rating scale was used for this item. The six-point scale was comprised of the five-point scale in Table 1 and the choice "Not Offered" for respondents to select if their institutions did not sponsor the sport. Finally, respondents were asked to offer their insights to the role of intercollegiate athletics in retention of first-time, first-year students.

Campus and Individual Demographics

Sixteen items were used to obtain demographic data about the institutions of the respondents. These data were obtained as supplemental information to the study. Five items were used to obtain demographic data about the individual respondents as supplemental descriptive information for the study.

Pilot Study

A pilot survey was sent to 20 randomly selected deans of students from 154 institutions sponsoring NCAA Division III intercollegiate athletics without football. The pilot survey was sent to gather feedback about the clarity of the language in the survey, to ascertain that the instructions were clear, to test the online procedures, and to assist in the development of decision rules for analysis of open-ended responses. A pre-notification with a brief explanation of the study was e-mailed from the researcher via his UNCG account to the sample participants. A detailed invitation to the pilot study was e-mailed directly from SurveyMonkey.com the following day. One follow-up message was sent to

the non-respondents over a two-week period. The pilot study was conducted from June 18, 2008 to July 2, 2008.

There were 4 responses to the pilot study (3 respondents completed the survey, and 1 respondent opted out of the survey). Although the response rate was low (20%), the responses indicated that the language in the survey was too vague for respondents to provide meaningful responses. Specifically, the respondents' answers to open-ended items indicated that the focus of practices was on the retention of athletes. Therefore, the language of the survey needed to be modified to gather data on the role of intercollegiate athletics in the retention of all first-time, first-year students, both athletes and non-athletes. Instructions for the survey were modified to specify that respondents should include retention efforts incorporating intercollegiate athletics for all of their students.

Feedback of the survey structure indicated that the survey was cumbersome and needed a means to move forward when participants did not have responses to items requesting descriptions of retention practices. Respondents indicated that Section II was confusing and lengthy for respondents not having intentional retention practices including intercollegiate athletics. Skip logic was added to the instrument in "Section II: Retention practices involving intercollegiate athletics." In a paper questionnaire, an example of skip logic might be stated as "If no, then skip to item #6." Skip logic in the online questionnaire allows the participants to move forward in the questionnaire dependent upon the response to specific items. Respondents answering the first item in Section II: "To what extent are intercollegiate athletics at your institution intentionally incorporated in the efforts to retain all first-time, first-year students (athletes and non-athletes) from

the first year to the second year?” with “Not At All” were skipped to Section III. This change was made to improve the likelihood that these respondents would complete the survey.

A second pilot study was used to test the on-line procedure by adding follow-up reminders to improve the response rate. The second pilot survey was sent to 20 randomly selected deans of students from 134 institutions with NCAA Division III intercollegiate athletics without football excluding those deans who were selected for participation in the first pilot study. A pre-notification e-mail with a brief explanation of the study was sent to the participants by the researcher. A detailed invitation containing the hyperlinks to the survey and to an opportunity to opt out of the study was sent to the participants via SurveyMonkey.com. Four follow-up messages with the detailed message attached were sent to the non-respondents over a two-week period. There were 10 respondents to the survey with 7 participants in the study and 3 respondents opted out. This was an improvement from the first pilot study that had 3 completed surveys and 1 opt-out). The second pilot study was conducted between November 11, 2008 and November 26, 2008.

For the second pilot, the survey instrument had clarified language to emphasize that respondents should consider all students (athletes and non-athletes) when responding. Respondents indicated that their intercollegiate athletics programs were influential in developing social integration among their first-time, first-year students. Respondents described community building and school spirit benefits of their intercollegiate athletics programs, as well as, the interactions that take place among first-time, first-year students and their faculty, staff, and peers. The pattern of an athlete focus

is evident from the responses of how intercollegiate athletics contribute to social integration (see Appendix B for examples of responses).

The respondents indicated that intercollegiate athletics are “very much” intentionally incorporated in their institutions’ retention efforts. The mean for the responses was 3.86 (std. dev. = 1.07) on the 5-point rating scale. Responses to the items soliciting retention practices revealed a pattern that retention practices intentionally incorporating intercollegiate athletics at the respondents’ institutions focus on the athlete population. Of the twelve described retention practices, nine focused on the athletes and three focused on the general student population. These retention practices are consistent with the finding of Weatherall (2006) in which institutions utilized intercollegiate athletics to influence overall first-time, first-year student retention through the retention of athletes. The described retention practices varied between practices to influence academic integration and social integration. Five of the practices involved the academic integration of athletes through study halls, success courses, and academic support programs. Three of the practices involved social integration of athletes (one practice) and all first-time, first-year students (two practices). The practice fostering social integration of athletes included peer mentoring. The practices for the general students included mandatory attendance of two athletic events of the students’ choosing and a means to foster informal interactions with deans. Other practices described were administrative communications among coaches, academic support staff, and student life staff designed to keep several institutional parties aware of student progress.

Procedure

The population for the study was identified through NCAA membership information available at D3Football.com, a website dedicated to NCAA Division III football statistics and information. The population was selected for inclusion in the study if the institution competed in Division III football in 2008 and awarded four-year baccalaureate degrees (one institution competing in Division III is an apprentice trade school that awards associate degrees). The e-mail address of the student affairs professional identified as the dean of students or its equivalent was obtained from each institution's website. If an address was not available via the institution's website, the researcher requested the address via telephone.

After receiving approval from the Institutional Review Board of The University of North Carolina at Greensboro (UNCG), the deans of students of each institution in the population were notified of the study via an e-mail from the researcher via his UNCG e-mail account. The notification briefly explained the nature of the study and informed recipients that an invitation with a detailed explanation would be sent via the on-line survey host, SurveyMonkey.com. The participants were sent an e-mail requesting their participation via SurveyMonkey.com within twenty-four hours of the initial e-mail message. The message detailed the purpose of the survey and contained a hyperlink to the on-line survey. The invitation offered an opportunity to "opt out" of the study for those who did not wish to participate. Five follow-up e-mail messages containing the first detailed invitation and hyperlink to survey website were sent via SurveyMonkey.com to participants who did not respond by participating or by opting out of the study. The on-

line surveying of participants began on December 5, 2008 and closed on January 31, 2009.

Responses to the questionnaire were downloaded from the survey website into spreadsheet format for analysis. Any response identifying the institution or the individual responding to the questionnaire were de-identified for the study.

Analysis

Data generated from the response to the questionnaire were analyzed to address each research question. Responses to the scales rating the extent to which intercollegiate athletics foster social integration, rating the extent to which intercollegiate athletics were intentionally incorporated in retention practices, and rating of the effectiveness of practices and sports were analyzed using SPSS Statistics version 17.0. Responses to questions requesting descriptions were categorized based on the decision rules developed from the second pilot study described in the previous section. Descriptions of the analysis as related to each research question follows.

Research Question A: To what extent do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?

Descriptive statistics were calculated for all rating scale variables related to the extent to which intercollegiate athletics contribute to social integration. Pearson product moment correlation coefficient was calculated to analyze the relationships among the six variables contributing to social integration and the overall rating of the extent to which intercollegiate athletics contributes to social integration.

Research Question B: How do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?

The descriptions from respondents to open-ended questions of how intercollegiate athletics foster social integration through developing a sense of community, developing a sense of belonging, developing a supportive social environment, facilitating interactions with peers, staff, and faculty were categorized by the focus of the description. Responses were categorized as “Athlete Focus,” “General Student Focus,” and “Other.” Participants in the survey in the second pilot study indicated specific foci in their responses. A response with an athlete focus explicitly referred to how intercollegiate athletics fostered social integration among athletes. For example, “team building” would have an athlete focus because non-athletes cannot participate in the experience. Responses categorized as “general student” indicated that they were not exclusive. For example, a response indicating how students interacted with one another a while attending an athletic event would have a general student focus. Responses with an “other” focus would explicitly indicate alumni or local community involvement without mentioning students. Frequencies of categorized responses were calculated.

Research Question C: To what extent are intercollegiate athletics intentionally incorporated in the retention practices of NCAA Division III institutions sponsoring football?

Descriptive statistics were calculated for the participants’ ratings regarding the extent to which intercollegiate athletics are intentionally incorporated in the retention

practices of the institutions. The rating scale ranged from 1 = Not at All to 5 = Absolutely.

Research Question D: In what ways are intercollegiate athletics included in the retention practices of NCAA Division III member institutions sponsoring football?

The descriptions from respondents to the open-ended questions regarding retention practices were categorized by the focus of the description. Responses were categorized as “Athlete Focus” and “General Student Focus” as determined from the second pilot study. The responses were categorized further as to the type of practice described as was done in the second pilot study. Frequencies of categorized responses were calculated.

Research Question E: How effective are retention practices involving intercollegiate athletics at NCAA Division III member institutions sponsoring football?

Descriptive statistics were calculated for the rating scale variables related to the effectiveness of the individually described retention practices and for the overall effectiveness of the described retention practices.

Research Question F: What intercollegiate sports at NCAA Division III member institutions are more or less effective in the retention of first-time, first-year students sponsoring football?

Descriptive statistics were calculated for the rating scale variables related to the effectiveness of the overall intercollegiate athletics programs of the institutions and of the sports included in the study (football, women’s basketball, men’s basketball, volleyball,

women's soccer, men's soccer, baseball, softball, women's ice hockey, and men's ice hockey).

CHAPTER IV

RESULTS

The purpose of this study was to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs. In the first two chapters, the rationale for the study was presented and the relevant literature was reviewed. In the preceding chapter, the research methods of the study were presented. This chapter presents results of the study.

Response Rate

Survey invitations were sent to 242 deans of students of institutions sponsoring NCAA Division III intercollegiate athletics with football. A total of 112 individuals responded to the online questionnaire by participating through responding to at least one item (n=88) or by opting out of the study (n=24). The response rate for the survey was 46.3%. Of the 88 participants, 86 were determined to be useful for a participation rate of 35.5%. The respondents to the online questionnaire provided significant data on the retention practices of Division III institutions that intentionally incorporate intercollegiate athletics, a topic that has not received much attention in research.

Participants

The participants in the study (N = 86) were primarily from private institutions (n = 68) and had the Carnegie Classification of Baccalaureate College (n = 51). Most of the

institutions had total enrollments less than 2,500 students (n = 53) with first-time, first-year student enrollment between 250 and 749 students (n = 53). The majority of institutions (n = 57) had between 20 and 59% of their students participating in intercollegiate athletics. Considering the small size of the institutions and the number of students participating in the intercollegiate athletics programs, the influence of intercollegiate athletics on the retention of first-time, first-year students is likely to be significant. Most (n = 68) of the institutions' intercollegiate athletics programs competed only in NCAA Division III non-scholarship intercollegiate athletics programs. The majority of institutions total cost of tuition, room, and board was \$30,000 or greater (n = 52). Many students at these institutions received financial aid to defray the cost of attendance. The majority of the institutions (n = 62) had 60 – 100% of their first-time, first-year students receiving financial aid. Most of the institutions (n = 59) were residential campuses with at least 60% of their undergraduate students living on campus. Seventeen institutions had all of their first-time, first-year students living on campus. The majority of the institutions (n = 48) had 80 – 99% of their first-time, first-year students living on campus. The influence of residential policies on the retention of the first-time, first-year students is significant at these institutions.

The majority of individual respondents in the study were student affairs professionals with the job title of vice president or dean (n = 61). Most respondents had at least 1 year of experience in their current positions (n = 66); thus, the respondents should be knowledgeable regarding their institution's retention practices. Most of the respondents identified themselves as White, non-Hispanic (n = 65). Complete

demographic results for the institutions and individual respondents are found in Appendix C.

Results for Research Questions

Research Question A: To what extent do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?

Participants in the study rated the extent to which intercollegiate athletics foster social integration on their campuses using a 5-point rating scale (1 = Not at All; 5 = Absolutely). The mean and standard deviation for the variables rated are found in Table 2. The mean rating for the contributions to social integration overall was 3.79 (SD = .73). The highest rated variable (M = 3.81, SD = .82) was the contributions intercollegiate athletics make toward developing a sense of belonging in the students. The lowest rated variable was the facilitation of student and faculty interactions (M = 2.75, SD = .85).

The relationship of the ratings of the contributions to social integration were correlated with Pearson product moment analysis. All seven variables were positively and significantly related at the .01 level (see Table 3). The strongest correlations were between the overall contributions and developing a sense of community ($r = .73$), and between developing a sense of community and developing a supportive social environment ($r = .73$). The weakest correlation was between the overall contributions and facilitating student and staff interactions ($r = .34$).

Table 2

Means and Standard Deviations for Ratings of Extent to Which Intercollegiate Athletics Foster the Development of Social Integration among First-Time, First-Year Students (N = 86)

| Variable | Frequencies of rating responses | | | | | | <i>M</i> | <i>SD</i> |
|--|---------------------------------|---|----|----|----|----|----------|-----------|
| | <i>n</i> | 1 | 2 | 3 | 4 | 5 | | |
| Overall contribution to social integration | 84 | — | 3 | 24 | 45 | 12 | 3.79 | .73 |
| Sense of community | 84 | — | 5 | 29 | 31 | 19 | 3.76 | .87 |
| Sense of belonging | 81 | — | 3 | 27 | 33 | 18 | 3.81 | .82 |
| Supportive social environment | 81 | — | 9 | 20 | 44 | 8 | 3.63 | .81 |
| Student and faculty interactions | 81 | 5 | 24 | 40 | 10 | 2 | 2.75 | .85 |
| Student and staff interactions | 82 | 1 | 17 | 36 | 22 | 6 | 3.18 | .89 |
| Student and peer interaction | 80 | — | 7 | 24 | 34 | 15 | 3.71 | .87 |

Note. 1 = Not at All; 2 = Very Little; 3 = Somewhat; 4 = Very Much; 5 = Absolutely

Table 3

Correlation between Variables Contributing to Social Integration through Intercollegiate Athletics (N = 86)

| | Sense of Community | Sense of Belonging | Supportive Environment | Faculty Interactions | Staff Interactions | Peer Interactions |
|------------------------|-----------------------|-----------------------|---------------------------|-------------------------|-----------------------|----------------------|
| Overall | .73 | .66 | .65 | .51 | .34 | .58 |
| Sense of Community | — | .67 | .73 | .61 | .53 | .70 |
| Sense of Belonging | | — | .66 | .43 | .49 | .56 |
| Supportive Environment | | | — | .65 | .63 | .69 |
| Faculty Interactions | | | | — | .67 | .61 |
| Staff Interactions | | | | | — | .72 |
| Peer Interactions | | | | | | — |

Note. All correlations are significant at .01 level.

Research Question B: How do intercollegiate athletics foster social integration among first-time, first-year students at NCAA Division III member institutions sponsoring football?

Respondents were asked to list up to three ways in which intercollegiate athletics contribute to six variables of social integration (developing a sense of community, developing a sense of belonging, developing a supportive social environment, facilitating interactions between students and faculty, facilitating interactions between students and staff, and facilitating interactions between students and peers). The frequencies of respondents giving multiple responses is found in Table 4. Responses were categorized by the focus of the response. A response with an athlete focus indicated how intercollegiate athletics contributed to the athlete's social integration on campus. For example, team bonding experiences and interactions with coaches have athlete foci because non-athletes would not have these experiences. Responses with general student foci indicated how intercollegiate athletics contributed to the social integration of the entire student population. Responses in the "Other" category indicated how external constituents (e.g., alumni and local community members) of the institution integrated with the institution. For example, members of the local community in which the institution is located might attend events and interact with students, faculty, and staff. Examples of categorized responses are in Table 5. Frequencies of the categorized responses for each question were calculated (Table 6).

Table 4

Number of Respondents Offering Single or Multiple Responses to Questions About How Intercollegiate Athletics Foster Social Integration (N = 86)

| | Total number of respondents | Number of respondents offering 1, 2, or 3 responses | | |
|---|-----------------------------------|--|----|----|
| | | 1 | 2 | 3 |
| Contribute to developing a sense of community | 70 | 7 | 11 | 52 |
| Contribute to developing a sense of belonging | 64 | 10 | 25 | 29 |
| Contribute to developing a supportive social environment | 55 | 17 | 18 | 20 |
| Facilitate interactions between students and faculty | 52 | 23 | 17 | 12 |
| Facilitate interactions between students and staff | 46 | 26 | 9 | 11 |
| Facilitate interactions between students and their peers | 48 | 20 | 21 | 7 |

Table 5

Examples of Variables Contributing to Social Integration by Focus

| Variable | Focus | Description |
|---|---------|--|
| Contribute to developing a sense of community | Athlete | <p>“Builds community within a specific team but not entire student body”</p> <p>“There is a strong community within each team, and athletes in general. Since so many of our students are athletes there is a natural common ground”</p> |
| | General | <p>“Gives our students a place to go to associate with friends and cheer on classmates.”</p> <p>“Sporting events generate opportunities for public expressions of school spirit.”</p> |
| | Other | <p>“Parents form a sense of community by supporting their sons/daughters who are student-athletes”</p> <p>“Local community interest and involvement (town-gown enhancement)”</p> |

| | | |
|--|---------|--|
| Contribute to developing a sense of belonging | Athlete | <p>“Even before coming to [our institution] our athletes have a reference group--other members of their team”</p> <p>“Service is expected by teams and it adds to a sense of being part of the university mission”</p> |
| | General | <p>“Provides a ‘collegiate’ feel to campus”</p> <p>“Provides a spirit for others to rally behind”</p> |
| | Other | <p>“Alums remain connected to the institution via their interest in sports.”</p> |
| Contribute to developing a supportive social environment | Athlete | <p>“Coaches provide and assign mentors to incoming students to facilitate smooth transition”</p> <p>“The coaches promote this through study tables, fun events, and mission trips over Spring Break.”</p> |
| | General | <p>“Provides a reason for faculty to support students outside of class”</p> <p>“Upper-class students introduce newcomers to the [institution’s] social environment”</p> |

| | | |
|--|---------|---|
| Facilitate interactions between students and faculty | Athlete | <p>“Athletes must speak to faculty about schedules”</p> <p>“Our student athlete association sponsors a semesterly social with faculty and a forum about the relationship between academics and athletics so all hear each others' perspectives”</p> |
| | General | <p>“A lot of our faculty go to sporting events, which allows students to see their faculty in casual settings.”</p> <p>“Athletic events offer opportunity for informal, positive contact between faculty and students”</p> |
| Facilitate interactions between students and staff | Athlete | <p>“Interactions with staff are facilitated primarily through support services for athletes”</p> <p>“Some initial relationships are built with residence hall staff because fall athletes arrive early to campus”</p> |
| | General | <p>“Students and staff interact a lot already. Athletics encourages interactions, but they</p> |

| | | |
|--|---------|--|
| | | aren't needed.” |
| | | “The ability to see students in a different light and for students to see staff in a different light” |
| Facilitate interactions between students and their peers | Athlete | “Intercollegiate athletics is a reason that students choose a school like ours. We are Division III and so our students often come to our campus to continue their high school sport. For fall sports, this might be the first group to which a student connects.” |
| | General | “Our athletic events are generally well attended. This is the social activity for our campus when there is a game or meet.” “Students discuss athletic contests around campus, in class, etc.” |

Table 6

Focus of How Intercollegiate Athletics Foster Social Integration

| | Total number of responses | Focus | | |
|---|------------------------------|---------|--------------------|-------|
| | | Athlete | General Student | Other |
| Contribute to developing a sense of community | 186 | 101 | 74 | 11 |
| Contribute to developing a sense of belonging | 147 | 115 | 26 | 6 |
| Contribute to developing a supportive social environment | 117 | 73 | 44 | — |
| Facilitate interactions between students and faculty | 94 | 54 | 40 | — |
| Facilitate interactions between students and staff | 81 | 51 | 30 | — |
| Facilitate interactions between students and their peers | 85 | 44 | 41 | — |

Note. The number of possible responses for each was 258 (86 respondents X 3 possible responses).

Research Question C: To what extent are intercollegiate athletics intentionally incorporated in the retention practices of NCAA Division III institutions sponsoring football?

Respondents (n=86) rated the extent to which intercollegiate athletics were intentionally incorporated in their retention practices using a 5-point rating scale. The mean rating was 3.23 (SD = 1.00). This rating indicated that the extent to which intercollegiate athletics were incorporated is between “Somewhat” (a rating of 3) and “Very Much” (a rating of 4).

Research Question D: In what ways are intercollegiate athletics included in the retention practices of NCAA Division III member institutions sponsoring football?

Respondents described 116 retention practices intentionally incorporating intercollegiate athletics. The practices were categorized by the focus of the practice as “Athlete” or “General Student” and the frequency of each focus was calculated. Respondents described 94 practices (81.0%) with an “Athlete” focus and 22 practices (19.0%) with a “General Student” focus.

The practices were then categorized by the type of practice described. The frequency of practice types is shown in Table 7. Examples of described practices are shown in Table 8. Practices involving academic support for all students were the most frequently described practices (n=32). Administrative procedures in which staff or faculty communicated about an athlete’s academic progress or social issues were the most frequently described practices (n=30) with an “Athlete” focus.

Table 7

Frequency of Described Practice Types by Focus

| Practice Type | Focus | |
|--------------------------|---------|---------|
| | Athlete | General |
| Academic support | 26 | 6 |
| Administrative procedure | 30 | — |
| Contact program | 13 | 3 |
| Orientation | 8 | 3 |
| Planned events | 6 | 3 |
| Recognition | 3 | — |
| Success program | 8 | 2 |
| Attendance at games | — | 5 |

Table 8

Examples of Described Practices Incorporating Intercollegiate Athletics by Focus and Type

| Practice Type | Focus | Description |
|--------------------------|---------|---|
| Academic support | Athlete | “We aggregate the varsity sports rosters for each individual sport. Coaches are given the rosters with mid-term and final grades, so they know which athletes to support.” |
| | General | “We treat all athletes the same way as regular students and ... have a very active FYI--First year Initiatives program.” |
| Administrative procedure | Athlete | “Coaches receive reports from the faculty regarding freshmen students via a four-week reporting system. This early warning system comes from faculty and is distributed to coaches, student life, and retention staff.” |
| Contact program | Athlete | “All fall first year athletes meet several times during the semester with Dean of Students to talk about enhancing success.” |
| | General | “Our athletic department sponsors [a student fan club] as a way to promote positive, responsible fan behavior for all contests.” |

| | | |
|----------------|---------|---|
| Orientation | Athlete | “Accommodations are made to athletes who arrive early to involve them in learning about the campus, to engage parents in orientation prior to the normal orientation, and to set expectations about policies and behavior.” |
| | General | “We have incorporated our opening Football game into Orientation Weekend when possible.” |
| Planned events | Athlete | “Team events beyond competition” |
| | General | “A lot of ritual on our campus is centered around athletic events. These rituals also serve to connect students to the culture of the campus. Events like Homecoming and Family Weekend would not be the same without a football game and volleyball game.” |
| Recognition | Athlete | “Coaches intentionally involve both college and local community in news briefs, special game events, so that people get to know the athletes better, as individuals. They are known as they travel around town, and are encouraged by others who have watched their team play.” |

| | | |
|---------------------|---------|--|
| Success program | Athlete | “Special programs for athletes are conducted about alcohol, sexual violence and academic success.” |
| | General | “Our [student success] groups include information and feedback from numerous campus outlets regarding student ‘issues’ or problems that might impact ultimate retention--our coaches, trainers, etc. are an integral part of that endeavor.” |
| Attendance at games | General | “Families of all new students are provided with one-year passes to all athletic events.” |

Research Question E: How effective are retention practices involving intercollegiate athletics at NCAA Division III member institutions sponsoring football?

Respondents rated the effectiveness of the retention practices they described using a 5-point scale (1 = Not at All; 5 = Absolutely). The effectiveness of the individually described practices was rated 3.46 (SD = .58). The overall effectiveness of all described practices was rated 3.52 (SD = .60). The effectiveness rating for the practices with an “Athlete” focus was rated 3.50 (SD = .54). The effectiveness of those practices with a “General” focus was rated 3.27 (SD = .70).

Table 9

Mean Effectiveness Ratings of Described Retention Practices

| | n | 1 | 2 | 3 | 4 | 5 | M | SD |
|---|-----|---|---|----|----|---|------|-----|
| Effectiveness of Individually Described Practices | 116 | | 4 | 56 | 55 | 1 | 3.46 | .58 |
| Overall Effectiveness of All Described Practices (N = 86) | 61 | | 5 | 29 | 26 | 1 | 3.52 | .60 |
| Effectiveness of Described Practices with Athlete Focus | 94 | | 2 | 43 | 49 | | 3.50 | .54 |
| Effectiveness of Described Practices with General Focus | 22 | | 2 | 13 | 6 | 1 | 3.27 | .70 |

Note. 1 = Not at All; 2 = Very Little; 3 = Somewhat; 4 = Very Much; 5 = Absolutely

Research Question F: What intercollegiate sports at NCAA Division III member institutions are more or less effective in the retention of first-time, first-year students sponsoring football?

Respondents rated the effectiveness of their overall intercollegiate athletics program and of ten specific spectator sports in the retention of first-time, first-year

students on a 5-point scale (1 = Not at All; 5 = Absolutely). The mean rating for the overall program was 3.22 (SD = .76). This mean rating indicates that the intercollegiate athletics programs are “Somewhat” effective in retaining students. The spectator sport with the highest rating was men’s basketball (M = 3.61, SD = .79). The lowest rated spectator sport was women’s ice hockey (M = 2.92, SD = .90). There were no significant differences among the ratings ($F = 1.73, p = .07$). The mean ratings for all ten spectator sports are found in Table 10.

Participant Comments and Insights

Participants were given an opportunity to offer comments on and their insights of the role intercollegiate athletics has in the retention of first-time, first-year students. Twenty-nine respondents provided comments. Some comments were directed toward the need to have coaches who are engaged with their athletes as students. Some indicated their difficulty in answering the questionnaire items because they either did not have knowledge of retention practices or did not have evidence of effectiveness. The insights provided will be used in the following chapter to enhance the discussion of the results. A list of all participants’ comments and insights is found in Appendix D

Table 10

Mean Ratings of the Effectiveness of Intercollegiate Spectator Sports in Retention of First-Time, First-Year Students (N = 86)

| Sport | n | 1 | 2 | 3 | 4 | 5 | 6 | M | SD |
|---|----|---|----|----|----|----|-----|------|------|
| Overall intercollegiate athletics program | 60 | 1 | 9 | 26 | 24 | | n/a | 3.22 | .76 |
| Men's basketball | 69 | 1 | 5 | 19 | 39 | 5 | | 3.61 | .79 |
| Volleyball | 69 | 1 | 7 | 19 | 36 | 6 | | 3.57 | .85 |
| Women's soccer | 67 | 1 | 9 | 20 | 27 | 10 | 1 | 3.54 | .96 |
| Women's basketball | 69 | 1 | 10 | 20 | 34 | 4 | | 3.43 | .87 |
| Men's ice hockey | 18 | 1 | 2 | 6 | 7 | 2 | 46 | 3.39 | 1.04 |
| Men's soccer | 66 | 1 | 10 | 22 | 30 | 3 | 3 | 3.36 | .85 |
| Softball | 66 | 1 | 12 | 20 | 30 | 3 | 3 | 3.33 | .88 |
| Baseball | 64 | 1 | 8 | 27 | 25 | 3 | 4 | 3.33 | .82 |
| Football | 69 | 3 | 9 | 31 | 19 | 7 | | 3.26 | .97 |
| Women's ice hockey | 12 | 1 | 2 | 6 | 3 | | 53 | 2.92 | .90 |

Note. 1 = Not at All; 2 = Very Little; 3 = Somewhat; 4 = Very Much; 5 = Absolutely; 6 = Not Offered

CHAPTER V

DISCUSSION AND CONCLUSIONS

The purpose of this study was to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs. An online survey was developed from the review of literature to measure the extent to which intercollegiate athletics contribute to the social integration of students, to measure the extent to which intercollegiate athletics are intentionally incorporated in retention practices, to obtain descriptions of such practices, and to measure the effectiveness of the practices and intercollegiate athletic programs in retaining students. Results from the survey indicated that intercollegiate athletics contribute to six variables that foster social integration among first-time, first-year students. Intercollegiate athletics are incorporated in intentional retention practices at a moderate level and primarily for the benefit of athletes. Eight intercollegiate sports were found to be moderately effective in retaining first-time, first-year students. The current chapter presents a discussion of the findings, offers future research suggestions, offers conclusions, and recommended retention practices intentionally incorporating intercollegiate athletics.

Intercollegiate Athletics and Social Integration

Participants in this study indicated that intercollegiate athletics at their institutions contribute to the social integration of their students. Respondents focused on their athletes in their descriptions of how intercollegiate athletics contribute to social integration. The participants' institutions were small, private, residential institutions with up to 60% of their students participating in intercollegiate athletics. The proportion of athletes in the student body at these institutions is greatly different from the proportion of athletes at the institutions that were studied by Boyer (1987) and Toma (2003). The institutions in those studies were large institutions such as University of Michigan and Louisiana State University (Toma, 2003) with Division I intercollegiate athletics programs where the proportion of athletes in the student population is considerably lower than it is at the institutions in Division III non-scholarship intercollegiate athletics programs. For example, in the 2008 academic year, athletes at Division III Guilford College in Greensboro, North Carolina made up approximately 15% (344 students) of the college's total enrollment (U.S. Department of Education, 2009). In the same year at the University of North Carolina at Chapel Hill, a Division I institution, athletes accounted for approximately 4% (765 students) of the total undergraduate enrollment (U.S. Department of Education, 2009). The following is a discussion of the variables that contribute to social integration at the Division III institutions.

Developing a Sense of Community

Respondents rated the extent to which intercollegiate athletics contribute to the development of a sense of community between "Somewhat" and "Very Much" with a

rating of 3.76 on a 5-point rating scale (n = 84). The open-ended question soliciting responses as to how intercollegiate athletics contribute to developing a sense of community garnered the most responses (n = 186). Administrators of these institutions indicated that intercollegiate athletics contribute to the development of a sense of community amongst students, faculty, staff, alumni, and local residents.

Athletes at small, private, residential institutions develop a sense of community on the campus through their involvement with their teams. This is a different form of community building through intercollegiate athletics than what is found at larger institutions where spectator involvement is a source of developing a sense of community (Boyer, 1987). For the first-time, first-year students participating in athletics, this can influence their sense of community on campus. One respondent referred to the benefit these students have from their participation: "First year students immediately have a smaller peer group to get to know." Team members immediately have the shared norms and values of their teams. The shared norms and values are essential to students developing their sense of a community on the campus (Toma, 2003).

Intercollegiate athletics serve as a means for unifying the students who are not participating in the sports programs. Attending the sports events serves as an entertainment option that develops the communal bonds for the students. Non-athletes attending the games develop their communal bonds with their peers, faculty, and staff of their institutions because the events give them opportunities to, in the words of one respondent, "mix in the stands" with one another. Another respondent asserted that the intercollegiate athletics program at the institution "brings people together at contests."

This assertion is similar to the assertions of other sports bringing groups together for common goals at universities and broader communities (Duderstadt, 2000; Lever, 1983; Toma, 1998, 2003; Wann et al., 2001).

In a similar manner, some respondents wrote of the effects of their intercollegiate athletics on the development of community within their local communities and with other constituents of their institutions. One respondent stated that the local involvement with intercollegiate athletics was a “town-gown enhancement” for the institution. Another stated that parents of athletes created a sense of community through their support of athletes and their attendance of events. These comments are indicative of the potential unifying effect of intercollegiate athletics beyond the campus (Lever, 1983; Wann et al., 2001).

Developing a Sense of Belonging

The rating of the extent to which intercollegiate athletics contributes to developing a sense of belonging had the highest average of the six variables of social integration with a rating of 3.81 (n = 81). Most of the responses indicated that the intercollegiate athletics programs develop a sense of belonging amongst the athletes, non-athletes, and other constituents of the institutions. Administrators indicated that the camaraderie of the teams and bonding of the teams developed the sense of acceptance and affiliation with the institution. As one respondent stated, “Student athletes are closely connected with each other and provide a place for bonding with each other and with the campus.” Another respondent commented, “Even before coming to [our institution] our athletes have a reference group – other members of their team.” The athletes have

degrees of affiliation to the institution and of acceptance from peers and staff (coaches, athletic trainers) before entering the institution. This is particularly relevant for the fall sport athletes, as noted by some respondents, who arrive on campuses before other students for pre-season workouts.

The sense of belonging that athletes develop with their teams can have an effect on retention according to one respondent, “Having built a strong sense of belonging and social support, many student-athletes, whether they go out [for their sport] the next year or not, are positively disposed to return to college.” The bonds developed by playing the sport carry beyond the playing surface. The athletes develop a feeling of acceptance from their peers, faculty, and staff to a sufficient degree to affect their desire to continue with their institution (Freeman, Anderman, & Jensen, 2007).

To a lesser degree, administrators indicated that non-athletes develop a sense of belonging to the institution through intercollegiate athletics. However, the intercollegiate athletics programs are sources with which students can develop an affiliation to the institution through attendance of games or wearing of the institution’s sports-related clothing such as a sweatshirt with the institution’s logo. The intercollegiate athletics program gives students a source of pride in their institutions (as some respondents indicated, a successful program is helpful in developing the sense of pride). Students who are attending games and wearing their school’s colors are satisfying their affiliation needs and becoming a part of their institutions (Green & Costa, 2007; Maslow, 1982; Wann et al., 2001).

The sense of belonging to the institution continues through the intercollegiate athletics programs after graduation. Some respondents commented on the interest alumni have in the intercollegiate athletics programs and how alumni remain connected to their institutions through sports programs.

Developing a Supportive Social Environment

A supportive social environment is one in which personal bonds are developed between students, faculty, and staff to assist in the student's adjustment to college (Tinto, 1993). The extent to which intercollegiate athletics contribute to the development of a supportive social environment was rated between "Somewhat" and "Very Much" with a rating of 3.63 on a 5-point scale (n = 81). The majority of responses as to how intercollegiate athletics contribute to this variable of social integration were focused on the athletes.

Several respondents wrote of the support that the coaches gave to their players to assist in their adjustments to college. One respondent stated, "Coaches provide and assign mentors to incoming students to facilitate smooth transition." This particular institution's coaching staff made the intentional effort to involve their athletes in mentoring first-time, first-year students. This enhances the students' abilities to adjust and adapt to their new environment. It also gives them a specific person to seek when they are experiencing difficulties.

A different way of developing a supportive social environment at one institution was described. At the institution, the athletes "are given time and encouragement to attend campus-wide dances, socials, [and] events." The same institution allows "athletes

...time to join service [and/or] social fraternities and sororities.” This institution gives its athletes the opportunities to develop their personal bonds, thus their social support network, beyond the athletic department.

Watson and Rich (2000) stated that “friends” are motivated to attend sports events “to provide moral support” (p. 22) for those in competition. Several respondents wrote of the non-athletes supporting their peers by attending events and of the faculty and staff attending events in support of their students. One respondent stated that intercollegiate athletics “provides a reason for faculty to support students outside of class.” The intercollegiate athletics programs provide opportunities for non-athletes to support their friends and for faculty to support their students. Thus, intercollegiate athletics at these institutions foster the supportive social environment critical for social integration (Tinto, 1987, 1993).

Facilitating Interactions between Students and Faculty

The extent to which intercollegiate athletics facilitate interactions with faculty was rated “Very Little” with a mean of 2.75 on a 5-point rating scale (n = 81). Some open-ended responses indicated that this might be due to the lack of attendance by faculty at athletic events or, in the words of one respondent, “Faculty do not seem particularly disposed to understand the reasons ... for intercollegiate programs.” However, 52 respondents provided 95 ways in which they think intercollegiate athletics facilitate student and faculty interactions.

Of the 95 ways in which intercollegiate athletics facilitate interactions between students and faculty, 47 had an athlete focus. Several respondents described the need of

athletes to talk with their faculty about missing classes due to athletic events. This notification increases the ability of athletes to interact with their faculty and can lead to informal conversations. It also offers opportunities for athletes to invite their faculty to events. To foster positive interactions, some respondents describe programs in which faculty served as mentors for teams or as a “coach” for specific competitions.

There were 40 described ways that intercollegiate athletics facilitate interaction between non-athletes and their faculty. Some of these described how faculty attended games and would have opportunities for informal conversations with their students. One respondent stated that intercollegiate athletics gives faculty the opportunity “to spark conversation” with students who may be reluctant to speak with faculty. This response is in line with Baird’s (2000) suggestion that students be informed of how to approach their faculty for conversations. These conversation opportunities incorporating intercollegiate athletics, either by attending events or by using intercollegiate athletics as a conversation starter, facilitate interactions that allow students to see their faculty in less formal settings.

Facilitating Interactions between Students and Staff

The extent to which intercollegiate athletics facilitate interactions between students and staff was rated 3.18 on a 5-point scale (n = 82). The number of responses to the open-ended question soliciting ways in which intercollegiate athletics facilitate these interactions was the lowest with 46 respondents offering 82 ways. Of these responses, 52 were focused on the interactions of the athletes.

Interactions between athletes and staff were primarily through academic and social support for these particular students. Because coaches at many institutions are staff rather than faculty, respondents indicated that the many interactions the athletes have are with the athletics staff rather than with other staff members. One respondent stated, “Student-athletes are closely involved with coaches and athletic trainers, both of whom are staff.” The relationships that athletes develop with the athletic staff can lead to less formal interactions beyond the playing surface, training room, or other athletic facilities.

Some respondents wrote of the interactions the athletes have with specific staff groups not associated directly with intercollegiate athletics. One group that is significant to the social integration of first-time, first-year students is the residence hall staff. The residence hall staff is important to fall athletes in particular because these athletes typically arrive to campuses early for pre-season training.

The responses of how intercollegiate athletics facilitate interactions between non-athletes and staff ($n = 30$) are similar to the responses for student and faculty interactions. The responses described the conversations that students and staff would have about the intercollegiate athletics programs success in competition. Like with faculty, these conversations could lead to informal interactions between the students and staff.

Facilitating Interactions between Students and Peers

The rating of the extent to which intercollegiate athletics facilitate interactions between first-time, first-year students and their peers was an average of 3.71 on a 5-point rating scale ($n = 80$). Of the variables about interactions, this was the highest rated. Forty-

eight respondents offered 85 ways that intercollegiate athletics facilitate interactions among students.

For athletes, these interactions are mostly with teammates. One respondent stated, “The primary interaction is facilitated among first year student athletes who are on non-varsity squads.” This response indicates the importance of first-time, first-year students who are athletes having opportunities to interact with one another as well as with other students. One respondent wrote, “Athletes are grouped for First Year Orientation with other athletes.” This is one example of offering first-time, first-year students the opportunity to interact socially during orientation, a recommended practice to foster social integration (Braxton & McClendon, 2001-2002). Isolating athletes into orientation groups could have a downside. One respondent stated, “Within teams there [are] plenty of interactions, but not beyond the athletic program as much.”

Some respondents wrote of their campuses having large proportions of their students participating in intercollegiate athletics that result in interactions amongst all students. One respondent wrote, “35% of our students ARE (sic) athletes, so interactions are unavoidable!” Thus, athletes and non-athlete students have opportunities to discuss competitions in residence halls and in classes. For non-athletes, respondents wrote of the social aspect of attending games. One respondent commented, “Our athletic events are generally well attended. This is the social activity for our campus when there is a game or meet.” To enhance their attendance of games, one respondent wrote, “[A] new spirit organization ... was designed specifically to encourage first-year student participation to support student athletes.” This offers an opportunity for the non-athletes to support their

peers but also offers opportunities for social interactions outside classrooms and residence halls.

Retention Practices Incorporating Intercollegiate Athletics

The majority of the practices described by the respondents had athlete foci. That is, the practices were designed with the primary purpose of retaining athletes. For NCAA Division III institutions, this is somewhat anticipated because the majority of these institutions are small, private institutions. In this study, most of the institutions were private ($n = 68$) with an enrollment of less than 2,500 students ($n = 53$) and with between 20 and 59% ($n = 57$) of their students participating in intercollegiate athletics. Thus, the athletes at these institutions make up significant proportions of the total enrollments. Weatherall's (2006) study of small private colleges found that intercollegiate athletics are used in the enrollment management practices to increase enrollments. Additionally, studies have found that administrators have assumed that athletes can be retained at their institutions at higher rates than their non-athlete counterparts (DiMaria & Pullano, 2004; Weatherall, 2006). Therefore, it is understandable that these institutions would develop retention practices for the specific population of athletes.

As shown in the conceptual model for this study (Figure 2), the intercollegiate athletics program is found in the social domain of the institution. Thus, the retention practices incorporating intercollegiate athletics enhance the social integration of the students. In the current study, intercollegiate athletics is a significant part of the social environment for a large proportion of the student body because they participate in intercollegiate athletic programs. Therefore, the retention practices to foster social

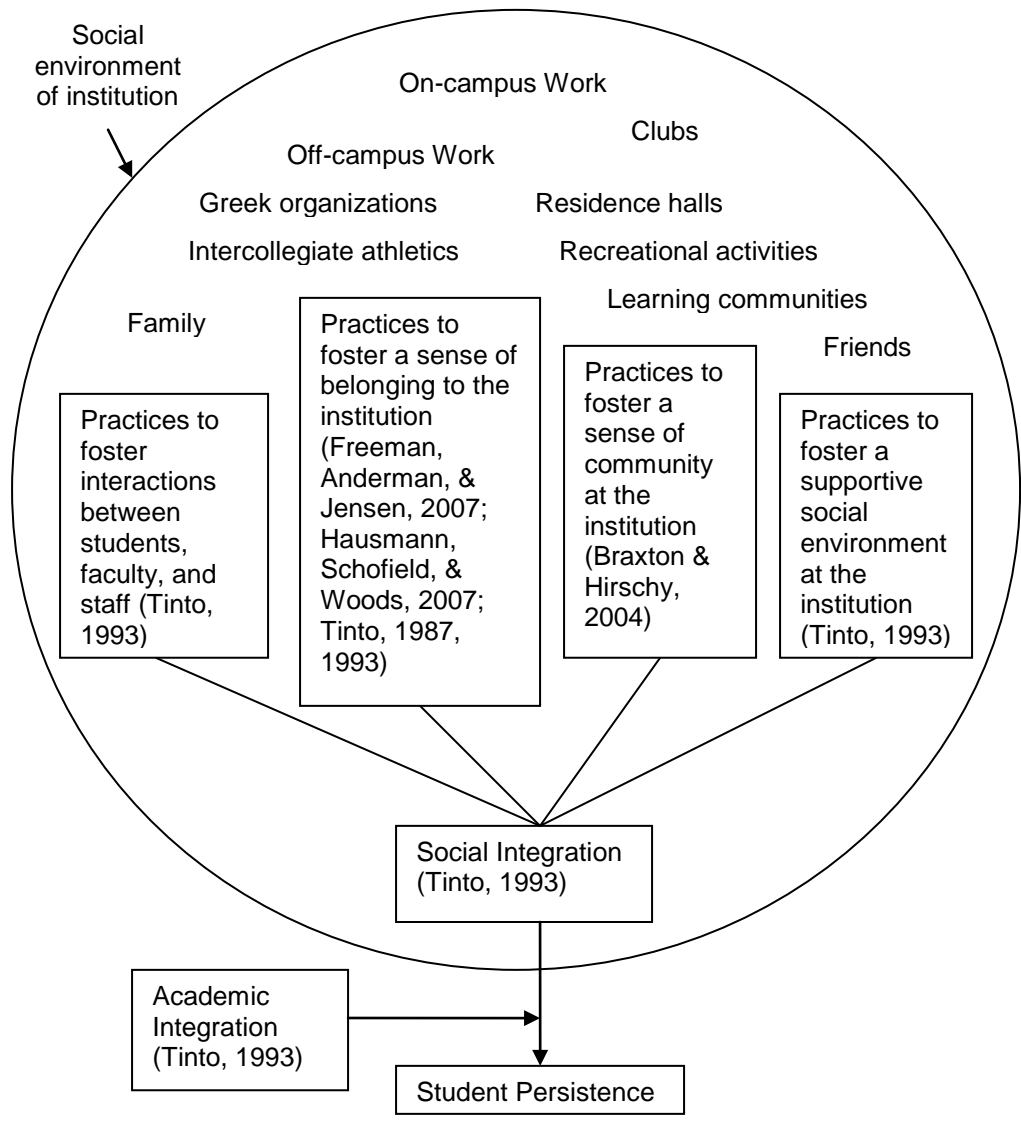


Figure 2: Conceptual Framework Based on Braxton & Hirschy (2004), Freeman, Anderman, & Jensen (2007), Hausmann, Schofield, & Woods, (2007), and Tinto (1987, 1993)

integration in athletes may also influence the social integration and the overall retention of students. In this study, the majority of the practices with athlete foci described by the respondents foster a supportive social environment (Tinto, 1993) through mentoring programs, success programs, and administrative procedures to assure that athletes are progressing satisfactorily in their academic pursuits. Practices such as having athletes attend orientation with non-athletes without interruptions for athletic practices foster a sense of community (Toma, 2003) among all first-time, first-year students. The recognition of athletes at campus events such as convocation or chapel services may enhance the sense of belonging (Freeman, Anderman, & Jensen, 2007) to the institution in these students. Because of the large proportion of athletes in the total enrollment, practices to facilitate interactions among students and the faculty, staff, and peers were not prevalent. Some respondents indicated that the number of athletes in classes and residence hall increased that likelihood of interactions with others; that the interactions were unavoidable.

All of the retention practices described followed the principles of effective retention suggested by Tinto (1993). First, the described practices were for the welfare of the students (primarily athletes). The practices were designed to serve the students rather than the institution and showed a commitment to the students' educational and social well-being. Second, many of the described practices were for the educational benefits of the students. The practices deviated from Tinto's (1993) principle in that he recommended that practices be for all students, not specific groups. One respondent did indicate that the most effective practice on their campus was to treat all students, athletes

and non-athletes, the same way without special treatment or exclusive programs for any group of students. However, because athletes at Division III institutions account for such a large proportion of students and because these students have special relationships with specific staff members (coaches, athletic trainers, and facility managers), it might be appropriate and acceptable to develop and implement retention practices for these specific populations of students. Finally, the described practices were believed by the respondents to develop supportive communities at the institutions. Tinto (1993) asserted that supportive campus communities are necessary for students to assist students in their integration with their institutions. Practices to enhance the supportive environment of the institutions were described as means to establish student connections with staff and to enhance communication amongst faculty and students. The following sections discuss the described retention practices that respondents rated as “Very Much” or “Absolutely” effective on the 5-point rating scale (“Not at All” to “Absolutely”).

Effective Practices for Retaining Athletes

Respondents rated the effectiveness of the practices intentionally incorporating intercollegiate athletics that they described. The practices with athlete foci rated as “Very Much” effective on the rating scale involved academic support programs and administrative procedures. The academic support programs that were described included study tables, mentoring by coaches, and collaboration between the athletic departments and faculty, academic advisers, and support centers. These practices assist the athletes with their academic integration but also develop supportive environments for these students (Tinto, 1993). One respondent stated the need for these practices:

Our institution has incredibly high academic standards, so when students miss classes, it is very difficult to pass. This creates a challenge for the travel schedules of our student-athletes, so we have specific meetings with student-athletes, coaches, and academic advisers to help understand the importance of the balance. We also work very closely with coaches, faculty, and student athletes when there is an early alert regarding a student athlete not performing well in a class (regardless of whether that athlete is in season).

Administrative procedures included those practices that did not directly involve contact with the students. Those practices with an effectiveness rating of 4 (“Very Much”) on the 5-point rating scale were those incorporating collaboration between the athletics department staff and other campus offices such as residence life and student affairs. These practices provide communication of academic progress and behavioral issues between the athletics staff. One respondent stated, “Coaches develop one-on-one relationships with academic support, residence life, counseling, and other Student Affairs administrators in order to develop individualized support systems for students.” Such collaborative practices contribute to the development of the supportive social network for the athletes. However, to be effective, athletics staff must be willing to put forth effort in developing the relationships with other areas of the institution. One respondent made this clear:

You must hire coaches and administrators who perceive the value of interconnected relationships with each other; and, the value of relationships with students in a retention effort. If you hire coaches or administrators who aren't interested in retention efforts, then your programs can't be effective! Our coaches actively ENGAGE (sic) us in discussions, meetings, responses.

One way that collaborations can occur is through the campus retention or enrollment management committee. Some respondents stated that their athletic director was involved with their retention or enrollment management committee. Being a part of the campus retention or enrollment management committee gives the athletic department staff opportunities to discuss the practices and efforts that are effective in retaining athletes and to develop support for their efforts (Hossler & Anderson, 2005).

Effective Practices for Retaining Non-Athletes

Three retention practices intentionally incorporating intercollegiate athletics with the general student population received ratings of 4 on the 5-point rating scale. The practices included incorporating intercollegiate athletics in planned events such as homecoming and having student booster clubs.

Incorporating intercollegiate athletics in the events such as homecoming or family weekends offers opportunities for students to interact with their faculty, staff and peers in informal ways. This practice also connects first-time, first-year students to the larger institutional community of alumni and families. The traditions and cultures of the campus are also enhanced through these events. Toma (2003) asserted that the campus cultures are developed with a specific purpose of building the sense of community. One respondent indicated that intercollegiate athletics are integral to the introduction of the campus rituals and culture to their first-time, first-year students.

A lot of ritual on our campus is centered around athletic events. These rituals also serve to connect students to the culture of the campus. Events like Homecoming and Family Weekend would not be the same without a football game and volleyball game.

Incorporating intercollegiate athletics in the planned campus events offers opportunities for first-time, first-year students to learn more about the campus culture. Research has indicated that students develop their sense of community on the campus and their loyalty to the institution when they have learned the campus culture (Siegel, 2007).

Student booster clubs offer first-time, first-year students opportunities to identify with their institutions through intercollegiate athletics. The students in these clubs attend games together and interact with one another at athletic events while supporting their friends on the athletic teams. The motivation to attend athletic events in support of friends who may be classmates or residence hall neighbors is strengthened through such clubs (Watson & Rich, 2000). Time spent at these athletic events with and for friends help students identify with their institutions. The students' identification with their institution is a positive factor in the retention of students (Wann & Robertson, 2002).

Effectiveness of Intercollegiate Athletics Programs in Retention

Respondents rated the effectiveness of their intercollegiate athletics programs and ten spectator sports in the retention of all students, athletes and non-athletes. Respondents ($n = 60$) rated the effectiveness of their overall intercollegiate athletics programs slightly above "Somewhat" with an average rating of 3.22 on a 5-point rating scale. This finding is contrary to Potter's (2000) finding of the importance of intercollegiate athletics to students. In his study of students attending institutions in Oklahoma, Potter (2000) found that intercollegiate athletics were not important to decisions of non-athletes to remain at their institutions. Administrators in the current study indicated that their intercollegiate athletics programs enhance the campuses and that they contribute to the sense of

belonging to their institutions. One respondent stated, “For the general population, the sense of community and pride in their institution often comes from the bragging rights provided by athletics. This is an invaluable part of helping students feel strongly about ‘their’ university.” This supports previous research on students at Division I institutions identifying with their institutions through intercollegiate athletics (Wann & Robertson, 2002) and suggests that winning teams at smaller institutions (a source of “bragging rights”) may influence the sense of belonging. By contributing to the students’ sense of belonging, intercollegiate athletics foster the social integration of athletes, as well as, non-athletes.

In analyzing the effectiveness of specific sports in the retention of students, football was rated slightly above the overall intercollegiate athletics program average rating (3.22, n = 60) with an average rating of 3.26 (n = 69). This rating was the lowest of the sports with more than 60 respondents; the lowest rating was for women’s ice hockey at 2.92 (n = 12). Baseball (n = 64) and softball (n = 66) received the same effectiveness rating of 3.33 on the 5-point rating scale. One aspect of these sports that can cause concern for the retention of students is the player-to-playing opportunity-ratio. One respondent stated,

These two sports [football and baseball] are the most likely to over-recruit past a rational roster size. [One hundred-twenty] football players is excessive; there [are] not enough playing opportunities for a group that size, even with a JV program. [Forty] baseball players is too many as well.

Another respondent stated:

Much of this retention can be seen among the players that actually have an opportunity to play. Many freshman students walk-on in varsity sports and some do not play the first year. The coach can have a great influence on the return of a student in the second year.

Athletes may become discouraged with their institutions and withdraw from the institutions if they do not have playing opportunities because the athletes are committed to their athletic goals rather than their institutions (Hyatt, 2003). Therefore, it is important for coaches to interact actively with the first-year athletes on their teams to explain why they might not be playing in their first season in intercollegiate competition. Such interactions may develop more institutional commitment in the athletes which would lead to their persistence with the institution (Hyatt, 2003; Tinto, 1993).

Another drawback to the large teams is the athlete-to-coach ratio. When this ratio is large, coaches will have fewer individual interactions with their athletes. However, one respondent indicated that large teams might have positive effects on retaining students.

The larger the squad size [is] and the more competitive the team [is,] it seems more difficult to retain student athletes in returning to the sport... however, because the sport helps the student better adjust to college by instantly providing a social network, it seems that we do retain these students at the college.

For the large teams to be effective in retaining their athletes, coaches must be actively engaged in developing supportive environments and actively interact with the students.

Additionally, the presence of support services such as study tables and well-developed training programs can influence the athletes' connectedness and sense of belonging to their institutions.

Although competitive success was not a variable in the present study, some respondents commented that the team's success influenced the effectiveness of a sport to retain athletes. One respondent wrote

The success of the particular sport has a measurable impact on the retention of those students I suspect. If a student is participating in a very successful, high profile team, I would think that student has an overall higher satisfaction of their experience and [is] more likely to return - assuming all other areas being equal.

Few teams can continue to have success in competition indefinitely. Hyatt (2003) stated that for some athletes the success of the team is inconsequential to their persistence at their institutions. However, if the athletes are influenced by the success of their teams, then it may serve the retention of these students to have their coaches interact with them to develop the athletes' commitments to their institutions (Hyatt, 2003).

Limitations and Future Research

While this study added to the knowledge of the role of intercollegiate athletics in student retention, the scope of this study was limited to institutions with non-scholarship NCAA Division III intercollegiate athletics including football. Additional research is needed on the role of intercollegiate athletics in the retention of first-time, first-year students at intuitions with different levels of intercollegiate athletics. Retention practices that are effective for Division III non-scholarship institutions might not be effective at

Division II athletic scholarship granting institutions of similar size. Additionally, the retention practices of four-year institutions are different from those at two-year institutions. Studies such as the current one at different levels of intercollegiate competition would inform practitioners of effective retention practices for their specific circumstances.

Additionally, the findings of this study indicate that the role of intercollegiate athletics in the retention efforts of NCAA Division III institutions is focused on the athletes. Retention and graduation data are not required by the NCAA for Division III institutions as they are for Division I and II institutions. Thus, in-depth analysis of the retention effectiveness of all intercollegiate sports sponsored at these institutions including spectator sports such as those included in this study and non-spectator sports such as cross-country running, equestrian, and golf, would be beneficial to these institutions. Determining the effectiveness of the specific sports might influence the retention practices adopted for these institutions.

Finally, more depth is needed in developing an understanding of how intercollegiate athletics influence the retention of all first-time, first-year students. This study gathered the perspectives of student affairs professionals, some of whom did not have empirical data to support their responses. Qualitative studies with interviews of students (athletes and non-athletes) would serve research into the students' perspectives of the role of intercollegiate athletics in their enrollment and persistence decisions. Case studies of institutions with high retention rates detailing the role of their intercollegiate athletics programs in their retention efforts would benefit practitioners.

Contributions to the Field

Retention practices incorporating intercollegiate athletics at Division III institutions have not been previously studied. The results from this study make a significant contribution to the field of retention in higher education. To enlighten retention practitioners of these institutions, this study will be presented at professional conferences and will be submitted for publication in academic journals specifically for professionals who work with first-time, first-year students and student retention. In addition, the findings of the study have implications of interest among sport management professionals. Therefore, the study will be presented at conferences tailored for sport management studies and at conferences directed toward the study of intercollegiate athletics.

Conclusion and Recommended Practices

The purpose of this study was to determine the role of intercollegiate athletics in the retention of first-time, first-year students and to determine how intercollegiate athletics are incorporated in the retention practices of institutions with NCAA Division III athletic programs including football. The role of intercollegiate athletics in the retention of first-time, first-year students of these institutions is primarily one that benefits the retention of athletes. Administrators of these institutions focused primarily on their athletes when describing how intercollegiate athletics contribute to the social integration of their students. It has been determined through this study that intercollegiate athletics at small, private institutions sponsoring NCAA Division III programs have a role in developing a sense of community, sense of belonging, and supportive social

networks amongst their athletes. Intercollegiate athletics at these institutions also facilitate interactions among the athletes and their peers (predominately teammates and other athletes), institutional staff (primarily coaches), and their faculty. To a lesser extent, administrators of these institutions indicated that their retention practices utilized intercollegiate athletics programs to influence the sense of community and sense of belonging to their institutions among all first-time, first-year students.

While individual institutions must implement retention practices that are appropriate for their students, this study suggests some effective retention practices that incorporate intercollegiate athletics. First, small, private, residential institutions with NCAA Division III intercollegiate athletics programs should implement retention practices that contribute to the development of a supportive social environment for their athletes. A practice of collaborating amongst athletic department staff, student affairs staff, and faculty to ensure that their athletes are successfully integrating, both academically and socially, within the institution is recommended. Such collaborations allows for the development of individualized efforts for athletes who might have difficulty in their adjustments to their institutions.

Second, small, private, residential institutions with large proportions of athletes should require that their coaches be aware of and engaged in retention efforts on their campuses. Coaches must be cognizant of an optimal number of athletes for their teams and be careful not to recruit athletes who might never have an opportunity to participate as a varsity athlete. Over-recruiting athletes can have a detrimental influence on the sense of belonging of those athletes who do not participate.

Finally, small, private, residential institutions should utilize their intercollegiate athletics events to develop a sense of community amongst their first-time, first-year students. Institutions with large proportions of athletes should encourage their students to attend athletic events to support their peers and to interact with friends, faculty, staff, and, in the case of homecoming, alumni. Athletic events at these institutions offer the opportunity for all campus constituents to create a level of social cohesion around their shared values of supporting their institution's teams.

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Appendix A. Survey Instrument

Introduction

Retention literature suggests that social integration is important to the retention of first-time, first-year students. Within the context of social integration, the literature suggests six factors that contribute to the student's social integration to their campus. Those factors are:

- Developing a sense of community at their institution
- Developing a sense of belonging to their institution
- Having a supportive social environment
- Having informal interactions with the faculty
- Having informal interactions with the staff
- Having informal interactions with their peers

One area within the social environment of the institution is the intercollegiate athletics program. The purposes of this survey are:

- To determine the extent to which intercollegiate athletics contribute to the retention of all first-time, first-year students (athletes and non-athletes) from the first year to the second year; and,
- To describe practices of formal involvement by intercollegiate athletics in retention programs.

Section I: Intercollegiate athletics contributions to social integration

The following questions ask you to indicate to what extent you think intercollegiate athletics contributes to social integration by selecting the appropriate number (1=Not at All to 5=To a Very Great Extent). Please rate each item independently and give your first impression.

1. To what extent do you think intercollegiate athletics at your institution contribute to developing social integration?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

2. To what extent do you think intercollegiate athletics at your institution contribute to developing a sense of community?

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

3. Please list up to three specific ways you think intercollegiate athletics at your institution contribute to developing a sense of community.
- -
 -

4. To what extent do you think intercollegiate athletics at your institution contribute to developing a sense of belonging?

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

5. Please list up to three specific ways you think intercollegiate athletics at your institution contribute to developing a sense of belonging.
- -
 -

6. To what extent do you think intercollegiate athletics at your institution contribute to developing a supportive social environment?

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

7. Please list up to three specific ways you think intercollegiate athletics at your institution contribute to developing a supportive social environment.
- -
 -

8. To what extent do you think intercollegiate athletics at your institution facilitate interactions between students and faculty?

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

9. Please list up to three specific ways you think intercollegiate athletics at your institution facilitate interactions between first-time, first-year students and faculty.
-

- b.
- c.

10. To what extent do you think intercollegiate athletics at your institution facilitate interactions between students and staff?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

11. Please list up to three specific ways you think intercollegiate athletics at your institution facilitate interactions between first-time, first-year students and staff.

- a.
- b.
- c.

12. To what extent do you think intercollegiate athletics at your institution facilitate interactions between students and their peers?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

13. Please list up to three specific ways you think intercollegiate athletics at your institution facilitate interactions between first-time, first-year students and their peers.

- a.
- b.
- c.

Section II: Retention practices involving intercollegiate athletics

14. To what extent are intercollegiate athletics at your institution intentionally incorporated in the efforts to retain all first-time, first-year students (athletes and non-athletes) from the first year to the second year?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

[Respondents selecting “Not At All” automatically skip to Section III.]

In the following section, please describe up to three retention practices intentionally incorporating intercollegiate athletics at your institution and rate the effectiveness of those practices.

15. Describe one way your institution intentionally incorporates intercollegiate athletics in its retention practices of all first-time, first-year students.

16. How effective are the retention practices you have described in retaining first-time, first-year students at your institution?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

17. Does your institution have more than one way it intentionally incorporates intercollegiate athletics in its retention practices?

Yes

No

[Respondents selecting “No” automatically skip to Question 23.]

18. Describe a second way your institution intentionally incorporates intercollegiate athletics in its retention practices of all first-time, first-year students.

19. How effective are the retention practices you have described in retaining first-time, first-year students at your institution?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

20. Does your institution have another way it intentionally incorporates intercollegiate athletics in its retention practices?

Yes

No

[Respondents selecting “No” automatically skip to Question 23.]

21. Describe a third way your institution intentionally incorporates intercollegiate athletics in its retention practices of all first-time, first-year students.

22. How effective are the retention practices you have described in retaining first-time, first-year students at your institution?

| | | | | |
|------------|-------------|----------|-----------|------------|
| Not At All | Very Little | Somewhat | Very Much | Absolutely |
| 1 | 2 | 3 | 4 | 5 |

23. Overall, how effective are the retention practices you have described in retaining first-time, first-year students (athletes and non-athletes) at your institution?

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

24. Please rate the effectiveness of intercollegiate athletics at your institution in the retention of first-time, first-year students (athletes and non-athletes) from the first year to second year.

Not At All Very Little Somewhat Very Much Absolutely
 1 2 3 4 5

25. Please rate the effectiveness of the intercollegiate sports at your institution in the retention of first-time, first-year students (athletes and non-athletes) from the first year to second year.

| | Not at all | Very little | Somewhat effective | Very much | Absolutely | Not offered |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Football | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women's Basketball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Men's Basketball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Volleyball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women's Soccer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Men's Soccer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Baseball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Softball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Women's Ice Hockey | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Men's Ice Hockey | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

26. Please offer any other comments or your insights about the role of intercollegiate athletics in the retention of first-time, first-year students from the first year to second year.

Section III: Campus Demographics

Please respond to the following items.

27. Is your institution:
 Public
 Private
28. What is the Carnegie Classification of your institution?
 Baccalaureate College – Arts & Sciences
 Baccalaureate College – Diverse Fields
 Master's College or University – Small to Medium Program

- Master's College or University – Larger Program
 - Doctoral/Research University
 - Research University – High Research Activity
 - Research University – Very High Research Activity
29. What is the total undergraduate enrollment of your institution?
- Less than 1,000
 - 1,000-2,499
 - 2,500-4,999
 - 5,000 or greater
30. What is the current enrollment of first-time, first-year students at your institution?
- Under 250
 - 250-499
 - 500-749
 - 750-999
 - 1,000 or greater
31. What percentage of your total enrollment is traditional students (under age 25)?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
32. What percentage of your total undergraduate enrollment lives in campus housing?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
33. What percentage of your first-time, first-year student enrollment lives in campus housing?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
34. What percentage of your total enrollment is female?

- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
35. What percentage of your total enrollment is (please give your best estimate):
- A. American Indian or Alaska Native _____
 - B. Asian or Pacific Islander _____
 - C. Black non-Hispanic _____
 - D. Hispanic _____
 - E. White non-Hispanic _____
 - F. Race/ethnicity unknown _____
36. What percentage of your current first-year cohort is first-generation college students?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
37. What percentage of your current first-year cohort receives financial aid?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
38. What percentage of students participate in intercollegiate athletics?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
39. Do all of your intercollegiate athletics programs compete in the NCAA Division III (no athletic scholarships)?
- Yes
 - No

40. In what state is your institution located? _____
41. What percentage of your total undergraduate enrollment is from in-state?
- Less than 20%
 - 20% to 39%
 - 40% to 59%
 - 60% to 79%
 - 80% to 99%
 - 100%
42. What is the total annual cost of tuition, room and board at your institution?
- Less than \$10,000
 - \$10,000 to \$19,999
 - \$20,000 to \$29,999
 - \$30,000 to \$39,999
 - \$40,000 to \$49,999
 - \$50,000 or greater

Section IV: Participant Demographics

43. What is your job title at your institution?
- _____
44. Does your institution's athletic department report to you?
- Yes
 - No
45. How many years have you been in your current position at your institution?
- Less than 1 year
 - 1 to 5 years
 - More than 5 years
46. What is your ethnicity?
- American Indian or Alaska Native
 - Asian or Pacific Islander
 - Black non-Hispanic
 - Hispanic
 - White non-Hispanic
 - Other _____
47. What is your gender?
- Female
 - Male

Thank You

I greatly appreciate you taking time from your day to complete this survey. If you would like a summary of the results from this study, please e-mail your contact information to me at ceharsha@uncg.edu.

Sincerely,

Clay E. Harshaw

Appendix B. Tables of Pilot Study Results

Table B1

Extent to Which Intercollegiate Athletics Foster Social Integration among First-Time, First-Year Students at Respondents' Institutions in Pilot Study

| Extent to which intercollegiate athletics: | Mean | Std Dev |
|--|------|---------|
| Contribute to developing social integration | 4.43 | 0.54 |
| Contribute to developing a sense of community | 4.29 | 0.76 |
| Contribute to developing a sense of belonging | 4.29 | 0.76 |
| Contribute to developing a supportive social environment | 4.14 | 0.90 |
| Facilitate interactions between students and faculty | 3.86 | 1.07 |
| Facilitate interactions between students and staff | 4.28 | 0.76 |
| Facilitate interactions between students and their peers | 4.00 | 0.89 |

Note. Rating scale 1 = Not at All, 2 = Very Little, 3 = Somewhat, 4 = Very Much, 5 = Absolutely

Table B2

Frequencies of Responses as to How Intercollegiate Athletics Foster Social Integration among First-Time, First-Year Students at Respondents' Institutions in Pilot Study

| Ways intercollegiate athletics: | Focus | | |
|--|---------|---------|--------------------|
| | Athlete | General | Other |
| Contribute to developing a sense of community | 11 | 9 | 1 ^a |
| Contribute to developing a sense of belonging | 16 | 3 | |
| Contribute to developing a supportive social environment | 7 | 5 | 1 |
| Facilitate interactions between students and faculty | 9 | 3 | 4 ^{c,d,e} |
| Facilitate interactions between students and staff | 12 | 1 | 4 ^{f,g} |
| Facilitate interactions between students and peers | 4 | 12 | 1 ^h |

^a Response related to developing ties to the external community beyond the institution.

^b Response stated issues that detract from the social environment.

^c Two responses cited the institutional size or class size as fostering interactions.

^d One response stated that faculty may not know of athletes' "extra efforts for studying."

^e One response stated: "They all support and promote the competitions."

^f One respondent referred to three intramural sport events for this item.

^g One respondent indicated bias due to seeing athletes for disciplinary reasons rather than informally.

^h Response stated that some "interactions are negative."

Table B3

*Frequencies of Retention Practices Intentionally Incorporating Intercollegiate Athletics
in Pilot Study*

| Practice | Athlete | General |
|--|---------|---------------|
| | Focus | Student Focus |
| Academic support | 4 | 0 |
| Contact program (Academic) | 1 | 1 |
| Contact program (Social) | 1 | 1 |
| Required attendance of athletic events | 0 | 1 |
| Administrative procedures | 4 | 0 |

Table B4

Examples of Retention Practices in Pilot Study

| Focus | Type | Description |
|---------|--------------------------|---|
| Athlete | Academic support | “Mandatory study halls for all first year athletes” |
| Athlete | Administrative procedure | “Retention statistics are kept for all first-time first year student athletes by the Director of Athletics. If the retention rate for student athletes is less than the overall college-wide rate, the Director has a conversation with the coach to determine how to best improve the rate.” |
| General | Contact program | “We have a comprehensive retention and advising system in place with very strong communication links between the faculty and deans, between dorm-based Student Academic Mentors (SAMs) and students, between SAMS and the deans, and have recently shifted to a Class Year Dean model to increase informal contact between students and the deans.” |

| | | |
|---------|-----------------|---|
| General | Game attendance | “All freshmen are required to attend two athletic games of their choice.” |
|---------|-----------------|---|

Table B5

Effectiveness Ratings of Specific Intercollegiate Athletic Sports Programs in Pilot Study

| Sport | Mean | Std Dev |
|--|------|---------|
| Football (sample did not include institutions supporting football) | — | — |
| Women's Basketball | 4.14 | 0.69 |
| Men's Basketball | 4.33 | 0.81 |
| Volleyball | 4.14 | 1.07 |
| Women's Soccer | 4.14 | 0.90 |
| Men's Soccer | 3.83 | 0.98 |
| Baseball | 3.83 | 0.98 |
| Softball | 4.29 | 0.76 |
| Women's Ice Hockey ^a | 3.00 | n/a |
| Men's Ice Hockey ^b | 2.00 | n/a |

^a Only one respondent's institution supported women's ice hockey.

^b Only one respondent's institution supported men's ice hockey.

Appendix C. Demographic Data of Respondents

Table C1

Demographic Data of Respondent Institutions

| | <i>f</i> | <i>P</i> |
|--|----------|----------|
| Type of institution | | |
| Public | 5 | 5.8 |
| Private | 68 | 79.1 |
| No response | 13 | 15.1 |
| Carnegie Classification | | |
| Baccalaureate College – Arts & Sciences | 34 | 39.5 |
| Baccalaureate College – Diverse Fields | 17 | 19.8 |
| Master’s College or University – Small to Medium Program | 14 | 16.3 |
| Master’s College or University – Larger Program | 3 | 3.5 |
| Doctoral/Research University | 2 | 2.3 |
| Research University – High Research Activity | 0 | |
| Research University – Very High Research Activity | 3 | 3.5 |
| No response | 13 | 15.1 |

| | <i>f</i> | <i>P</i> |
|---|----------|----------|
| Undergraduate enrollment | | |
| Less than 1,000 | 9 | 10.5 |
| 1,000-2,499 | 44 | 51.2 |
| 2,500-4,999 | 14 | 16.3 |
| 5,000 or greater | 6 | 7.0 |
| No response | 13 | 15.1 |
| First-time, first-year students enrollment | | |
| Under 250 | 6 | 7.0 |
| 250-499 | 36 | 41.9 |
| 500-749 | 17 | 19.8 |
| 750-999 | 5 | 5.8 |
| 1,000 or greater | 9 | 10.5 |
| No response | 13 | 15.1 |

| | <i>f</i> | <i>P</i> |
|--|----------|----------|
| Percentage of total enrollment is traditional aged | | |
| Less than 20% | 0 | |
| 20% to 39% | 0 | |
| 40% to 59% | 4 | 4.7 |
| 60% to 79% | 8 | 9.3 |
| 80% to 99% | 52 | 60.5 |
| 100% | 9 | 10.5 |
| No response | 13 | 15.1 |
| Percentage of total enrollment is female | | |
| Less than 20% | 0 | |
| 20% to 39% | 1 | 1.2 |
| 40% to 59% | 60 | 69.8 |
| 60% to 79% | 12 | 4.0 |
| 80% to 99% | 0 | |
| 100% | 0 | |
| No response | 13 | 15.1 |

| | <i>f</i> | <i>P</i> |
|---|----------|----------|
| Percentage of undergraduates living on campus | | |
| Less than 20% | 0 | |
| 20% to 39% | 6 | 7.0 |
| 40% to 59% | 7 | 8.1 |
| 60% to 79% | 30 | 34.9 |
| 80% to 99% | 27 | 31.4 |
| 100% | 2 | 2.3 |
| No response | 14 | 16.3 |
| Percentage of first-time, first-year students living on campus | | |
| Less than 20% | 0 | |
| 20% to 39% | 1 | 1.2 |
| 40% to 59% | 2 | 2.3 |
| 60% to 79% | 5 | 5.8 |
| 80% to 99% | 48 | 55.8 |
| 100% | 17 | 19.8 |
| No response | 13 | 15.1 |

| | <i>f</i> | <i>P</i> |
|--|----------|----------|
| Percentage of 2008-09 first-time, first-year students cohort is first-generation college student | | |
| Less than 20% | 17 | 19.8 |
| 20% to 39% | 37 | 43.0 |
| 40% to 59% | 9 | 10.5 |
| 60% to 79% | 5 | 5.8 |
| 80% to 99% | 1 | 1.2 |
| 100% | 0 | |
| No response | 17 | 19.8 |
| Percentage of 2008-09 first-time, first-year students cohort receiving financial aid | | |
| Less than 20% | 0 | |
| 20% to 39% | 3 | 3.5 |
| 40% to 59% | 7 | 8.1 |
| 60% to 79% | 10 | 11.6 |
| 80% to 99% | 49 | 57.0 |
| 100% | 2 | 2.3 |
| No response | 15 | 17.4 |

| | <i>f</i> | <i>P</i> |
|--|----------|----------|
| Percentage of total enrollment participating in intercollegiate athletics | | |
| Less than 20% | 9 | 10.5 |
| 20% to 39% | 38 | 44.2 |
| 40% to 59% | 19 | 22.1 |
| 60% to 79% | 6 | 7.0 |
| 80% to 99% | 0 | |
| 100% | 0 | |
| No response | 14 | 16.3 |
| All intercollegiate athletics programs at the institution compete in NCAA Division III | | |
| Yes | 68 | 79.1 |
| No | 4 | 4.7 |
| No response | 14 | 16.3 |

| | <i>f</i> | <i>P</i> |
|---------------------------------------|----------|----------|
| State in which institution is located | | |
| Alabama | 1 | 1.2 |
| California | 2 | 2.3 |
| Colorado | 1 | 1.2 |
| Connecticut | 1 | 1.2 |
| Delaware | 1 | 1.2 |
| Iowa | 5 | 5.8 |
| Illinois | 6 | 7.0 |
| Indiana | 4 | 4.7 |
| Massachusetts | 4 | 4.7 |
| Maryland | 1 | 1.2 |
| Michigan | 2 | 2.3 |
| Minnesota | 7 | 8.1 |
| Missouri | 2 | 2.3 |
| Mississippi | 1 | 1.2 |
| North Carolina | 2 | 2.3 |
| Nebraska | 1 | 1.2 |
| New York | 2 | 2.3 |
| Ohio | 9 | 10.5 |
| Pennsylvania | 5 | 5.8 |

| | | |
|-------------|----|------|
| Tennessee | 1 | 1.2 |
| Texas | 4 | 4.7 |
| Virginia | 5 | 5.8 |
| Wisconsin | 4 | 4.7 |
| No response | 15 | 17.4 |

| | <i>f</i> | <i>P</i> |
|---|----------|----------|
| Percentage of total undergraduate enrollment is from in-state | | |
| Less than 20% | 6 | 7.0 |
| 20% to 39% | 9 | 10.5 |
| 40% to 59% | 17 | 19.8 |
| 60% to 79% | 19 | 22.1 |
| 80% to 99% | 21 | 24.4 |
| 100% | 0 | |
| No response | 14 | 16.3 |
| Total annual cost of tuition, room, and board | | |
| Less than \$10,000 | | |
| \$10,000 to \$19,999 | 6 | 7.0 |
| \$20,000 to \$29,999 | 14 | 16.3 |
| \$30,000 to \$39,999 | 35 | 40.7 |
| \$40,000 to \$49,999 | 15 | 17.4 |
| \$50,000 or greater | 2 | 2.3 |
| No response | 14 | 16.3 |

Table C2

Estimated Ethnicity of Total Student Enrollment of Participant Institutions (n = 64)

| Ethnicity of total enrollment (estimated percentages) | <i>P</i> |
|---|----------|
| American Indian or Alaska Native | .7 |
| Asian or Pacific Islander | 4.1 |
| Black non-Hispanic | 8.0 |
| Hispanic | 4.5 |
| White non-Hispanic | 79.3 |
| Race/ethnicity unknown | 2.8 |

Note. No response was given by 22 participants.

Table C3

Demographic data of individual respondents

| | <i>f</i> | <i>P</i> |
|--|----------|----------|
| Job title | | |
| Vice President of Student Affairs | 34 | 39.5 |
| Dean of Students | 27 | 31.4 |
| Assistant Vice President | 2 | 2.3 |
| Associate Dean of Students | 2 | 2.3 |
| Assistant Dean of Students | 2 | 2.3 |
| Athletic Director | 2 | 2.3 |
| Dean of Enrollment & Retention | 1 | 1.2 |
| Assistant Dean of Students | 1 | 1.2 |
| Associate Vice President | 1 | 1.2 |
| Interim Dean of Students | 1 | 1.2 |
| No response | 13 | 15.1 |
| Intercollegiate athletics reports to respondent | | |
| Yes | 20 | 23.3 |
| No | 52 | 60.5 |
| No response | 14 | 16.3 |

| | <i>f</i> | <i>P</i> |
|----------------------------------|----------|----------|
| Years in position | | |
| Less than 1 year | 6 | 7.0 |
| 1 to 5 years | 33 | 38.4 |
| More than 5 years | 33 | 38.4 |
| No response | 14 | 16.3 |
| Ethnicity | | |
| American Indian or Alaska Native | | |
| Asian or Pacific Islander | | |
| Black non-Hispanic | 6 | 7.0 |
| Hispanic | | |
| White non-Hispanic | 65 | 75.6 |
| Other | 1 | 1.2 |
| No response | 14 | 16.3 |
| Gender | | |
| Female | 31 | 36.0 |
| Male | 41 | 47.7 |
| No response | 14 | 16.3 |

Appendix D. Participant Comments and Insights

38% of our first year students participate in athletics. For them, athletics plays a very big role in retention. For non-athletes, the role is very minor.

Depends on the program size and coach commitment.

Football continues to have the lowest retention rates as well as the lowest academic profile of new students.

have not gathered hard evidence - based on anecdotal info

Having built a strong sense of belonging and social support, many student-athletes, whether they go out the next year or not, are positively disposed to return to college.

Helping athletes mesh with other students in FYI, connect with their advisor from day one and the additional support athletes receive from coaches staff and sympathetic and supportive faculty all help.

I am not in a position to answer the questions about retention because I am not aware of specific efforts to directly integrate athletic activities into retention. On general principle, athletics are perceived as positive and there may be a "halo" effect but that is not part of a deliberate strategy about which I am aware.

I am unable to answer a number of these questions because we have not measured the effectiveness of the strategies specifically regarding athletics.

For the general population, the sense of community and pride in their institution often comes from the bragging rights provided by athletics. This is an invaluable part of helping students feel strongly about "their" university.

I really have no way of knowing how much our athletics program contributes to retention of all first-time, first-year students. We have a retention rate of 95% from first to second year, but I don't think 95% of our first-year students attend even one athletic contest. The checks above relate to how much attendance each sport receives from students, but again, I don't know what percentage of that attendance is from first-year students.

My sense is that the students who attend our institution choose it because of the exceptional academic environment available. About 25% of our students are student athletes. About 100-200 students attend athletic contests (depending on the sport - football, men's basketball, men's tennis, and swimming get the best attendance), but I'm not sure if those attendees are also athletes in other sports or if they are just great supporters of the teams.

If we did not have athletics at all, I suspect many of our current students would not choose our institution (because they seem to like the mix), but I suspect our retention rate would still be close to 95%.

Good luck with your project.

Its difficult to know how it affects "first-time" students, but it is my observation that athletics have an impact on retention as a whole for all student levels.

Much of this retention can be seen among the players that actually have an opportunity to play. Many freshman students walk-on in varsity sports and some do not play the first year. The coach can have a great influence on the return of a student in the second year.

I think retention among all students would increase if the students recruited for athletics were better prepared to participate in our university community - academically, spiritually, and socially.

It can be a plus or it can be a minus. Students who make it on a team have an advantage to being accepted socially and to find support from coaches. Early move ins and other programs help student athletes. Coaches can be a real support in the life of a student. If a student does not plan well and cannot manage time well, athletics can make life hard. If one is cut from a team, it often means they will not stay at our school. Coaches can also fail in helping students do the right thing in taking responsibility for their actions and going to class.

It depends on two things:

Does the team win and does the student have a chance to play at the championship level at some point and/or does the student play or perceive themselves to be able to play on the team in intercollegiate games in the future. If a kid comes to play ball and only to play ball, they will likely leave if they cannot or perceive that they will not play.

It was difficult to answer the above questions since we do not do anything intentionally aimed at retention regarding athletes. Our athletes retention rates are consistent with the student body as a whole.

I do not have a clear understanding of the questions above. It seems to suggest intercollegiate athletics has some special responsibility for retention. If my interpretation is correct, the view that athletics is somehow responsible, beyond the balance of the University represents a fundamental flaw in the logic of retention.

Students are not admitted to athletics, they are admitted to the University for whatever reason, as such the University has an across the board responsibility to help each student, uniformly, transition into a setting that provides them the opportunity to succeed.

It would be difficult to isolate the athletic program, much less the various sports, in attributing effectiveness of first-year student retention.

Our athlete retention rate is the same as the overall retention rate, but within certain teams the numbers are horrible, particularly football and baseball. I believe these sports have a higher concentration of athletes who have chosen college solely to continue playing their sport, thus they are at a much higher risk for not retaining into their sophomore year. Also, these two sports are the most likely to over-recruit past a rational roster size. 120 football players is excessive; there is not enough playing opportunities for a group that size, even with a JV program. 40 baseball players is too many as well.

Retention is also directly related to the academic potential of the students admitted. Students at our institution are placed into one of six academic bands upon admission to the college. The first academic band is the lowest ability student (marginal admit and very much at risk for retention) and band six is the highest ability students.

Retention of first time students that are athletes matches the same as non athletes.

Coaches serve as good role models.

The best coaches who are mentors for students, are also the most effective in retaining students!

Retention rates for our large men's programs are actually lower than the rest of the student body. I believe this is due to the motivation of some of these students to attend [our institution] (i.e. they come to play football first and academics/other pursuits are a distant second in some cases) and the students-to-coach ratio being too high for a relationship to form.

Same as for first year

The larger the squad size and the more competitive the team it seems more difficult to retain student athletes in returning to the sport... however, because the sport helps the student better adjust to college by instantly providing a social network, it seems that we do retain these students at the college.

The retention effect is really for athletes themselves rather than other non-athletes.

The success of the particular sport has a measurable impact on the retention of those students I suspect. If a student is participating in a very successful, high profile team, I would think that students has an overall higher satisfaction of their experience and are more likely to return - assuming all other areas being equal. However, if a student does not enjoy their academic program or other parts of their experience, I do not believe that athletic participation will keep them here.

We have a very good retention rate to begin with - 92% for first-time, first-year students from fall to spring and 86% to graduation. We begin by athletics and admissions working very closely to find the right candidate for our campus. As it relates to athletes, I think they are very well supervised by their coaching staff and I think there is value in this for students who might struggle a little.

You must hire coaches and administrators who perceive the value of interconnected relationships with each other; and, the value of relationships with students in a retention effort. If you hire coaches or administrators who aren't interested in retention efforts, then your programs can't be effective! Our coaches actively ENGAGE us in discussions, meetings, responses.

Students who really want to play sports will try to go where they can play. Committed coaches who care about the whole student aid the students in their academic success
